The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1353.—Vol. XXXI. LONDON, SATURDAY, JULY 27, 1861. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL. (Established 17 years.)

Mr. Crofts has FOR SALE:—500 Unity Fire, and 200 "State" Fire.

Mr. Crofts is a BUYER of shares in the following mines (cash on receipt of transfer, or exchanges made for other shares):—Brynford Hall, Herward United, Great Martha, East Caradon, West Frances, Great South Tolgus, Providence Mines, St. Ives, Carn Brea, West Caradon, East Basset, Tamar Silver-Lead, Herodsfoot, Bedford United, Cook's Kitchen, Wheal Norris, West Sharp Tor, Marke Valley, Dolcoath, West Seton, Wheal Harriett, Tincroft, North Robert, Ding Dong, Great Retallack, Cefn Cilcen, Old Tolgus United.

*** Holders of mining shares difficult of sale in the open market, and also of all life assurance and fire insurance shares, may hear of purchasers by applying to Mr. Crofts.

Special.—FOR SALE, 5 West Bryn Gwiog (an offer solicited). 1

MR. JAMES LANE. No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE, at nett prices:—20 Alfred Consols, £1⅛; 25 Bryntail, £2½; 20 Brynambor, 30s.; 40 Birch Tor and Vitifer, £2⅛; 20 Calstock Consols, 8s. 6d.; 15 Crebor, 11s. 6d.; 50 Dale, 15s. 6d.; 1 Ding Dong, £19½; 10 East Caradon, £24½; 10 East Russell, £4⅛; 20 East Devon, £2⅛; 30 Great Wheal Martha, 30s.; 30 Great Wheal Alfred, 12s.; 20 Great Retallack, 23s.; 5 Gonamena, £2; 20 Kelly Bray, 19s. 6d.; 20 Lady Bertha, £⅞; 5 Ludcott, £2¾; 5 Mary Ann, £9⅛; 10 Marke Valley, £8⅞; 30 North Hallenbeagle, 27s. 6d. (£1 paid); 10 North Downs, £4⅞; 20 North Exmouth, 3s. 6d.; 50 North Nant-y-Mwyn, 5s. 6d.; 20 Penhale Moor, £3½; 75 Ribden, 6s. 6d.; 30 South Condurrow, 12s. 6d.; 5 Trelawny, £14½; 150 Worthing, 14s. 3d.; 2 West Caradon, £44½; 14 Wheal Sicily, an offer wanted; 10 Wheal Anne, 21s.; and 5 West Rhosesmor, £12. 2

PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES,
79, OLD BROAD STREET, LONDON, E.C.
Telegraphic messages to Buy or Sell Mine Shares punctually attended to. 3

MR. W. LELEAN, MINE SHAREBROKER,
11, ROYAL EXCHANGE, LONDON, E.C. 4

MR. LELEAN is a BUYER of DING DONG SHARES.
11, Royal Exchange, July 26, 1861. 5

MR. J. S. PHILLIPS, C.E. AND M.E., SHAREBROKER, &c.,
12, ST. MICHAEL'S ALLEY, CORNHILL, LONDON. 6

MR. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, E.C., has BUSINESS to do in the following SHARES:—

Bedford Consols.	Great Retallack.	South Caradon Hooper.
Calstock Consols.	Lady Bertha.	Wheal Hearle.
East Caradon.	Marke Valley.	Wheal Moyle.
East Grenville.	North Downs.	Wheal Edward.
East Russell.	North Robert.	Wheal Arthur.
East Devon Consols.	North Trelawny.	Wheal Harriett.
Gawton United.	Pelyn Wood.	Wheal Norris.
Grambler.	Sortridge Consols.	Wheal Unity.
Great Caradon.	South Wheal Frances.	West Caradon.
	Stray Park.	

Mr. T. Rosewarne is on a tour of mine inspection in Devon and Cornwall, but any business letters sent to the office in his absence will have due attention.
July 26, 1861. Bankers: Bank of London. 7

JOHN WM. HUTCHINSON, No. 78, OLD BROAD STREET,
LONDON, E.C., has FOR SALE at nett prices, and for immediate delivery:—

10 Alfred Consols, 31s. 3d.	50 Great Retallack.	10 Marke Valley.
10 Bottle Hill, 12s. 6d.	5 Hearle, £8½.	2 Providence.
1 East Basset.	5 Kitty (Lelant).	35 St. Day United, 11s. 3d.
50 Furze Hill Wood, 6s. 3d.	20 Kelly Bray, 15s. 3d.	1 West Seton.
2 Grambler.	1 Margaret, £42.	1 Wheal Seton, £65.

July 26, 1861. 8

MR. R. H. M. JACKMAN, MINING AND SHAREBROKER,
No. 2, ADAM'S COURT, OLD BROAD STREET, E.C.

20 Charlotte United.	3 Herodsfoot.	2 West Caradon.
2 Rosewarne United.	50 New Frances.	1 New Seton.
1 Providence.	45 Wheal Unity.	25 Ludcott.
1 South Frances.	4 North Treskerby.	1 Wheal Seton.

The above shares have been placed in the hands of Mr. Jackman for *bona fide* sale to the highest bidder. Answers to offers for any of the same will be returned on Tuesday, if accepted.
July 26, 1861. Bankers: London and Westminster, Lothbury. 9

MR. JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, LONDON.
The "Mining Share Monitor" for July sent free for six postage stamps.
Bankers: London Joint-Stock Bank. 10

JOHN RISLEY, SHAREBROKER,
32, LOMBARD STREET, LONDON, E.C. 11

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 26, THROGMORTON STREET, LONDON, E.C.
Commission, 1¼ per cent. on £100 and above, and 2½ per cent. on less sums. 12

MR JOSEPH GREGORY, MINING OFFICES,
1, BANK CHAMBERS, LOTHBURY, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent. on £100 and above, 2½ per cent. on smaller sums.
Bankers: City Bank, Threadneedle-street. 13

MR. THOMAS SPARGO, SHAREBROKER,
224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.
Commission, 2½ per cent. 14

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), continue to TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, and are in a position to obtain reliable information respecting all dividend and progressive mines.
N.B.—Messrs. Horley and Co. publish a Weekly Mining List, with the closing prices, every Wednesday, and will be most happy to forward the same (gratis) on application. 15

MR. GEORGE BATTERS, 5, COWPER'S COURT, BIRCHIN LANE, DEALER IN BRITISH MINING SHARES AND OTHER STOCKS.
Mr. Batters, from long experience and intimate acquaintance with all Mining Stocks, can advise as to investment of capital, at the closest market prices, and has made a selection from the mines of North Wales likely to be largely profitable in respect of dividends, and with great prospects of advance in market value. Full particulars from personal inspection can be had on application.
Mr. Batters for some time past has been studying the North Wales lead mining district, and periodically inspects its most important mines, and is at all times in correspondence with the most intelligent agents in the counties of Flint and Denbigh, and will be happy to advise with his correspondents as to investments in these important districts. 16

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 14 years), has FOR SALE at nett prices the following shares:—3 West Caradon, £44½; 35 Crelake, £3; 100 East Grenville, 43s. 9d.; 60 East Russell, £3 18s. 9d.; 2 East Basset, £87¾; 4 Bryn Gwiog, £29¼; 10 Marke Valley, £8 19s.; 100 North Minera, 28s. 9d.; 90 Great Wheal Martha, 28s. 3d.; 100 West Polmear; 300 Casara, 6s. 9d.; 10 East Caradon, £24½; 60 Great Retallack, 21s.; 4 West Frances, £16; 25 North Downs; 5 West Bryn Gwiog, £22¾; 100 North Nant-y-Mwyn, 5s.; 70 Ribden, 6s.; 50 Calstock Consols; 4 Cook's Kitchen, £27½; 75 South Condurrow, 12s. 3d.; 5 Silver Rake, £16; 50 Cefn Cilcen; 100 Wheal Edward, £2; 50 Lady Bertha, 18s.; 25 Great Wheal Busy, £4¾; 4 Providence, £34¼; 50 Unity Consols, 18s. 6d.; 2 South Frances, £120; 200 Medland, 3s. 9d.; 100 Gurlyn; 50 Dale; 10 Linares, £7¾; 5 South Bryn Gwiog, £13⅞; 25 Great North Tolgus; 100 Bon Accord, £1 1s. 6d.; 1 South Caradon; 5 Long Rake, £9¾; 50 New Treleigh, £1⅞; 10 Wheal Hearle, £11; 25 Hingston Down, £2 2s. 3d.; 60 West Wendron, 9s. 6d.; 70 Gernick, 4s. 6d.; 20 Trencrom; 100 Crowlwm; 50 North Robert; 50 Silver Bank, 14s.; 35 Tolcarne, £2⅞. 17

FIFTEEN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM upon current value of shares, in CORNISH TIN and COPPER MINES.
Dividends payable two-monthly or quarterly.

MESSRS. TREDINNICK AND CO., MINING ENGINEERS, SEND their SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES upon the receipt of a Fee of One Guinea.
Review of Cornish and Devon Mining Enterprise, 5s. per copy.
Maps per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and Margaret Districts, 2s. 6d. each.
Cornish Mines, well selected, pay better than any other description of securities, are freer from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2½ per cent.
Money advanced at 10 per cent. annually, for short or long periods, upon approved Mining Shares.—78, Lombard-street, London, E.C 18

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.
In any business that George Moore is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER. 19

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

15 Alfred Cons., £1 10s.	40 Great Northern Copper, 28s. 9d.	4 So. Bryn Gwiog, £13¾
5 Anglo Mexican Mint, £3 18s. 9d.	20 Great Retallack, 21s. 9d.	2 South Basset, £12.
1 Basset, £82½.	10 Hings. Down, £2 1s. 9d.	1 South Wheal Frances, £125.
5 Brynford Hall, £9 1s 3d.	3 Herodsfoot, £36¾.	2 Silver Rake, £17.
1 Bryn Gwiog, £28¾.	10 Holmbush, £1 15s.	50 Ribden, 5s. 6d.
10 Bryntail.	50 East Kongsberg (fully paid up £5), an offer wanted.	20 Gernick, 4s. 6d.
2 Billins, £18.	10 Cumberland Black Lead (£4 paid), 33s.	30 South Herodsfoot.
1 Buller, £90.	2 Kitty (Lelant), £9¼.	50 Vale of Towy, 5s. 6d.
20 Bottle Hill, 10s. 6d.	20 Kelly Bray, 17s. 9d.	2 West Caradon.
30 Buller & Basset, 9s. 6d.	50 Lady Bertha, 17s. 9d.	20 West So. Caradon.
50 Bon Accord, 20s. 9d.	40 Lady Eliza, 10s. 9d.	50 Silver Bank (15s. paid) 13s. 6d.
2 Carn Brea, £67½.	10 Linares, £7¼.	2 Trelawny, £13 18s. 9d.
1 Cobre, £37½.	4 Long Rake, £10.	20 Trumpet United, 10s.
30 Cefn Cilcen, 18s. 9d.	5 Marke Valley, £9¼.	20 Tamar Con., £1 13s 9d
10 Camborne Vean, 40s. 6d.	3 Mary Ann, £9¼.	25 Utd. Mexican, £4 18 9
5 Craddock Moor, £23¾.	20 No. Frances, £2½.	5 West Stray Park, £5.
20 Carn Camborne, 21s. 6d.	30 North Minera.	1 West Sharp Tor, £38¾
5 Caradon Cons., £7 8s 9d.	5 North Basset, £3 10s.	20 Wheal Unity, 18s. 6d.
2 Cargoll, £15.	3 No. Treskerby, £20¾.	1 West Seton, £300.
8 Calvadnack, £7½.	10 North Downs, £4 7s. 6d.	2 West Basset, £17¼.
2 Cook's Kit., £29 5s.	20 New Treleigh, £1 16s 9d	10 West Margaret, 2s. 3d., ex call.
20 Central Minera.	3 Herward Utd., £7 18s 9d	60 Worthing, 14s.
25 Charlotte.	20 North Exmouth, 3s.	5 Wendron Con., £15½.
30 Casara.	1 New Seton, £46¾.	20 Wh. Grenv., 32s. 6d.
30 Dale, 14s. 6d.	50 North Rhine, 10s. 3d.	10 Wheal Harriett.
20 Deep Level.	10 North Dolcoath, 6s. 6d.	20 Wheal Crebor, 11s. 9d.
10 Drake Walls, 13s. 9d.	30 Nant-y-Iago, 15s. 9d.	2 Wh. Margaret, £42¼.
1 Devon Gt. Cons., £354.	5 North Crofty, £6.	5 West Bryn Gwiog, £31
20 East Russell, £3 16s. 9d.	10 New Frances, 9s. 3d.	5 Wh. Edward, £1 18s 9d
5 E. Carn Brea, £7 15s.	3 North Roskear, £19¼.	20 West Wendron, 9s. 6d.
25 East Grenville, 40s. 6d.	2 Rosewarne Utd., £22½.	5 Wheal Uny, £4¼.
10 East Gunnis Lake.	10 Rosewall Hill & Ransom, 24s. 9d.	15 West Providence.
10 East Rosewarne.	5 St. John del Rey, £33½.	20 West Polmear, 17s. 9d.
5 East Caradon, £24¼.	5 S. Carn Brea, £3 8s. 9d	1 Wheal Clifford, £172½
20 English and Australian Copper, £3 6s. 9d.	2 Stray Park, £32¾.	40 West Tolcarne, 8s. 6d.
5 Gt. S. Tolgus, £2 19s 6d	1 South Caradon, £302½.	40 Tees Side, 2s. 9d.
2 Grambler, £11¾.	1 St. Ives Cons., £32.	1 Wheal Seton, £67½.
20 Great Alfred, 9s. 6d.	30 Sortridge Consols, 13s.	20 Wheal Moyle.
20 Great Wh. Martha.		5 Wheal Hearle.
50 Great Moelwyn, 20s.		
5 Garlidna.		

Mr. Herron begs to direct the attention of his friends to the improved prospects of Old Tolgus United, and should they continue a large profit will be made by purchasing under £20 per share.
2, Adam's-court, Old Broad-street, July 26, 1861. 20

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.
Commission on share transactions, 1¼ per cent. on £100 and above, and 2½ per cent. for less sums. 21

MR. C. POWELL, MINE SHAREBROKER,
2, SPREAD EAGLE COURT, FINCH LANE, LONDON, E.C. 22

MR. EDWARD COOKE, 5, HERCULES PASSAGE, THREADNEEDLE STREET, LONDON, E.C., continues to advise the public generally in the selection of good mining property, either for investment with regard to receiving dividends or for speculation, and will endeavour in his selection to avoid all concerns of a doubtful character. From frequent visits into the principal mining districts, and his extensive correspondence with agents of the most undoubted reputation, Mr. Edward Cooke hopes to be enabled to make mining investment profitable to those who may favour him with their confidence.
July 26, 1861. Bankers: London and Westminster, Lothbury. 23

MR. J. SYKES, SHAREBROKER,
LEEK, STAFFORDSHIRE. 24

RICHARD CLIFT, MINE SHAREDEALER,
late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed. 25

MINES IN CARDIGANSHIRE.

MR. JAMES HAMMON, STOCK AND SHAREDEALER,
1, CROWN COURT, THREADNEEDLE STREET, LONDON, has SPECIAL BUSINESS to TRANSACT in BRYNAMBOR and WEST LISBURNE MINES, situate in the above rich mining county. 26

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent.—Bankers: London and Westminster Bank. 27

JOHN GLEDHILL AND CO., MINE AGENTS AND SHAREBROKERS, MINING OFFICES, CORN EXCHANGE, LEEDS. 28

MESSRS. THOMAS PENROSE and THOMAS PRICE UNDERTAKE ASSAYS and ANALYSES of EVERY DESCRIPTION of MINERAL PRODUCT, FUEL, and MANURES, at Messrs. Richardson and Co.'s Assay Office and Laboratory, Copper Ore Wharves, Swansea. 29

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE. 30

STOCK AND CO., LEAD AND SILVER SMELTERS,
PENCLAWDD, NEAR SWANSEA. 31

MESSRS. C. TOOKEY, F.C.S., AND M. W. JOHNSON, F.C.S.,
ASSAYERS, ANALYSTS, AND CONSULTING CHEMISTS.
LABORATORIES, 44, LINCOLN'S INN FIELDS, W.C. 32

REMOVAL.—GEORGE RICE, SHAREBROKER, has REMOVED from 10, Austinfriars, to more convenient offices, No. 1, FINCH LANE, CORNHILL. 33

CHRISTOPHER CONSOLS MINE, PARISH OF SITHNEY, CORNWALL.—ALL PERSONS HAVING CAIMS on this company ARE REQUESTED IMMEDIATELY to SEND PARTICULARS thereof to the undersigned, that the same may be examined and settled. W. MORTIMER,
Dated July 19, 1861. Stock and Sharebroker, 10, Bedford-circus, Exeter. 34

WHEAL ST. ANDREW MINE, PARISH OF GWITHIAN, CORNWALL.—ANY PERSONS HAVING CLAIMS on this company ARE REQUESTED to SEND PARTICULARS thereof to the undersigned, that they may be examined and settled. W. MORTIMER,
Dated July 19, 1861. Stock and Sharebroker, 10, Bedford-circus, Exeter. 35

DEVON BURRA BURRA MINE.—TO MERCHANTS AND OTHERS.—ALL PERSONS HAVING CLAIMS on this mine are REQUESTED to SEND the SAME FORTHWITH to Mr. W. A. Palmer, Tavistock, Devon; or to Mr. B. G. Eyton, 4, Lothbury, London, E.C. 36

COPPER AND LEAD MINES IN MONTGOMERYSHIRE.—TO BE DISPOSED OF, IN SHARES, most PROMISING WORKS, within five miles of the contemplated railway to Llanfyllin from Oswestry.—Apply to Mr. Rowlands, solicitor, Llanfyllin. 37

A LARGE FORTUNE may be REALISED for ONE POUND only.—For particulars, apply to Mr. Frederick Sintz, banker, of Frankfort-on-the Maine, or letters addressed to him, 28, Clement's-lane, Lombard-street, London. 38

MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30TH MARCH, 1861, is NOW READY.
Price One Shilling. At 117, Bishopsgate-street Within, London, E.C. 39

THE MIDLAND IRON COMPANY, ROTHERHAM, MANUFACTURERS of BEST "YORKSHIRE," and of STEEL IRON TYRE BARS, for LOCOMOTIVE ENGINE, CARRIAGE, and WAGON WHEELS. Also of REFINED, SCRAP, STEEL IRON and "YORKSHIRE" BARS, HOOPS, RAILS, ANGLE IRON, MALLEABLE SHAFTS, AXLES and FORGINGS. 40

VALUABLE DIVIDEND AND OTHER MINE SHARES FOR SALE, BY PUBLIC AUCTION.

MR. T. P. THOMAS has been favoured with instructions to SELL, BY PUBLIC AUCTION, at Garraway's Coffee House, Change-alley, Cornhill, London, on Thursday, the 1st of August, at Two o'clock precisely, the following VALUABLE MINING SHARES:—

5 Mount Pleasant.	5 Cuddra.
100 North Minera (£1 paid).	24 South Lady Bertha.
6 Old Tolgus United.	12 Wheal Emma (Buckfastleigh).
20 West Providence.	20 Bottle Hill.
20 Silver Bank.	10 Cornubia (20s. paid).
1 West Sharp Tor.	10 Fedn-an-drea United.
2 South Bryn Gwiog.	35 West Par Consols.
25 South Buller and West Penstruthal.	10 Tamar Consols.
25 Great North Tolgus.	8 Crowlwm.
10 Ribden (fully paid).	5 Boscundle.
15 Huckworthy Bridge.	5 Nant-y-Iago.
20 Victor Emanuel.	20 Drake Walls.
5 West Devon Consols.	10 Buller and Basset United.
5 West Tolvadden.	5 West Trevelyan.
4 East Tolgus.	5 Wheal Prosper.
3 East Trefusis.	5 Tolvadden.
2 Caradon Consols.	5 Great Wheal Fortune.
15 Vale of Towy.	

For particulars, catalogues, and conditions of sale, application to be made to Mr. T. E. W. Thomas, 16, Hackin's Hey, Liverpool; at Garraway's Coffee-house; at the *Mining Journal* office, 26, Fleet-street, E.C.; or to the Auctioneer, 2, Crown-court, Threadneedle-street, London. 41

FOR ABSOLUTE SALE, BODCOL LEAD MINE, LLANBADARN FAWR, NEAR THE DEVIL'S BRIDGE, CARDIGANSHIRE.

MR. T. P. THOMAS has been favoured with instructions to SELL, BY PUBLIC AUCTION, at Garraway's Coffee House, Change-alley, Cornhill, London, on Thursday, the 1st day of August, at One o'clock precisely, the above VALUABLE and EXTENSIVE MINE, together with the BUILDINGS, MACHINERY, PLANT, STORES, ORES, MATERIALS, and property of the shareholders in or upon the mine, comprising amongst other articles, a 40 ft. water-wheel, with line of rods &c.; 10 fms. of 7 in. pumps; valuable drawing-machine, bridge over the river, sundry tools and plant in and upon the sett, and other articles too numerous to mention.
For particulars, catalogues, and conditions of sale, apply to V. France, Esq., 37, New Bridge-street, Blackfriars, London; or to the auctioneer, 2, Crown-court, Threadneedle-street, London. 42

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 16, HACKINS HEY, LIVERPOOL.
The following SHARES have been placed in the hands of Mr. Thomas FOR SALE, at the prices affixed, free of any commission:—

20 Mount Pleasant (div.), £24.	10 So. Bryn Gwiog, £14½.	30 North Crofty, £6½.
100 North Minera, £1¼.	20 Crowlwm, 10s.	50 Carn Camborne, 21s 6d.
100 Lower Park, 17s. 6d.	20 So. Condurrow, 12s. 6d.	400 Ribden.
100 Colomendy, £1.	50 South Gernick, 4s. 6d.	50 Dulta (Tin, Limited).
10 Brynford Hall, £9½.	10 Rosewarne and Herland, £1 5s.	100 East Kongsberg Silver (£5 fully paid up), at £3½.
10 Herward United, £9¼.	20 East Seton, 3s. 6d.	

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JOHN R. PIKE, GENERAL SHAREDEALER,
3, PINNER'S COURT, OLD BROAD STREET, E.C. 44

FREDERICK WILLIAM MANSELL, MINING OFFICES,
1, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London Joint-Stock Bank. 45

A WALK THROUGH THE MINING DISTRICTS OF ENGLAND AND WALES.—A GENTLEMAN is DESIROUS of MEETING with a COMPANION. Start in about a week.—Address, "W. M.," *Mining Journal* office, 26, Fleet-street, London, E.C.—July 26, 1861. 46

TO MINING AND SMELTING PROPRIETORS.—A MINING ENGINEER, who has had considerable experience in the extraction of gold and silver from their ores, by various systems of reduction, both in Europe and South America, and also in lead and copper smelting and silver refining, is an accomplished assayer, and speaks fluently French, Spanish, and Portuguese, is DESIROUS of PLACING HIS SERVICES at the DISPOSAL of PARTIES INTERESTED in MINING or SMELTING OPERATIONS, either to take the management of works at home or in foreign countries, or professionally to report upon them. First-rate references can be given.—All communications to be addressed to "Q. E. D.," *Mining Journal* office, 26, Fleet-street, London. 47

IRONMASTERS.—A PERSON who has had the MANAGEMENT of IRONWORKS at home and abroad for many years is OPEN to an ENGAGEMENT. Highest testimonials and references can be given as to ability and character.—Address, "Z. Y.," *Mining Journal* office, 26, Fleet-street, London, E.C. 48

WANTED, a SITUATION as ENGINEER at an IRONWORKS or COLLIERY. The advertiser has had much experience in the management of blast, winding, pumping, and mill and forge engines and machinery, as well as inclines, self-acting and others. Makes his own plans, and superintends all repairs and new erections. Testimonials and references as to character and abilities if required.—Address, "Ferrum," *Mining Journal* office, 26, Fleet-street, London, E.C. 49

WANTED TO PURCHASE, a SECOND HAND or NEW HIGH PRESSURE ENGINE, to drive a saw-mill. Engine to have two horizontal cylinders, about 20 in. diameter, stroke 3 to 4 ft.—Apply to W. O. Johnston, Seghill Colliery, near Newcastle-on-Tyne. 50

WANTED, CHEMICAL AND ASSAYING APPARATUS.
The advertiser wishes to purchase, second-hand, the above apparatus, together with a lapidary's wheel,—Address by letter, to "W. M.," 13, Northwick-terrace, Maida-hill. 51

THE ADVERTISER is DESIROUS of EMPLOYMENT as ASSISTANT to a MINING ENGINEER. Is competent to undertake mineral and geological surveys. First-class references.—Address, "G. C.," *Mining Journal* office, 26, Fleet-street, London, E.C. 52

MINERAL BREAKS.—A LIBERAL PRICE WILL BE PAID for a CORRECT DRAWING of the BEST BREAK ACTUALLY USED on a MINERAL RAILWAY for BREAKING TRUCKS down HEAVY GRADIENTS and SHARP CURVES. Any plan not in actual practise is useless.—Apply by letter, to F. T. Barry, 1, Adelaide-place, London-bridge. 53

EAST WHEAL MARGARET.—This property not having been sold at the auction held at the account-house, on the mine, on Tuesday, the 16th July inst., the Committee are PREPARED to TREAT with ANY PARTIES who may be DISPOSED to BECOME PURCHASERS up to the 1st August next.
Dated East Wheal Margaret, Uny Lelant, July 17, 1861. 54

RIVER TAMAR COPPER MINING COMPANY (LIMITED).—Notice is hereby given, that the FOURTH ANNUAL GENERAL MEETING of the shareholders of this company will be HELD at the offices of the company, on TUESDAY, the 6th proximo, at One o'clock precisely.
By order of the Board, G. ANGUS, Sec.
10A, King's Arms-yard, Moorgate-street, London, July 23, 1861. 55

THE CASARA LEAD MINE COMPANY (LIMITED).—Notice is hereby given, that the THIRD HALF-YEARLY GENERAL MEETING of this company (which was adjourned from the 8th inst.) will be HELD at the office of the company, No. 27, Austinfriars, in the City of London, on Wednesday, the 31st July, 1861, at Three o'clock in the afternoon, to receive the directors' report for the last half-year, ending 30th June, 1861; to elect an auditor for the ensuing half-year; and to transact such other business as may be necessary, or the occasions of the company may require. By order, W. SIMPSON, Chairman.
27, Austinfriars, London, E.C., July 20, 1861. W. CHARLES, Secretary. 56

GRAND DUCHY OF BADEN CHARTERED MINES.—Notice is hereby given, that the ANNUAL GENERAL MEETING of shareholders in the Grand Duchy of Baden Chartered Mines will be HELD at the offices of the company, 5, Adam's-court, Old Broad-street, London, on WEDNESDAY, the 31st of July, at One o'clock precisely. By order of the Board, W. J. DUNSFORD, Sec.
July 21, 1861. 57

KARBITZ COLLIERY COMPANY (LIMITED).—NO APPLICATION FOR SHARES will be RECEIVED after THIS DAY (Saturday, the 27th inst.) By order, J. ELLIOTT SQUARE.
146, Gresham House, July 19, 1861. 58

EAST KONGSBERG NATIVE SILVER MINING COMPANY OF NORWAY (LIMITED).—Notice is hereby given, that the OFFICES of this company are REMOVED to No. 9, AUSTINFRIARS, CITY, E.C. 59

Original Correspondence.

PRACTICAL PAPERS ON COLLIERY OPERATIONS—No. VII.

ON THE MODUS OPERANDI OF GETTING COAL, WITH REMARKS UPON THE PRINCIPAL SYSTEMS EMPLOYED.

SIR,—The remaining system or method of getting coal that I shall treat upon, is one that is practised in many parts of both England and Wales, but it is, probably, employed more in the Lancashire than any other coal field. The levels are driven to the boundary in the manner previously described when treating upon the mines lying close to each other. When the boundary has been reached, a number of brows are driven up to the boundary, or old workings on the rise, at right angles with the levels, at distances varying from 20 to 40 yards asunder, and the first at half the distance from the boundary that the others are asunder. When the old workings, or boundary upon the rise, has been reached in the brow next to the boundary, a work, 5 or 6 yards wide, is commenced and driven to the boundary, and on the opposite side of this brow one of the same width is driven half the distance to the next brow. These works are not often driven upon the level of the mine, but upon such an angle that the coal gets the easiest, and produces the greatest percentage of hand-filled coal. When these works have been driven, the rails and timber may be drawn, and the jig removed, the distance of another work down-brow and another 5 or 6 yards worked out in like manner. The same operation may go on in an indefinite number of brows at the same time, always keeping the brow next to the boundary slightly in advance of the next to it, and preserving the same order throughout the whole. From each brow one-half of the coal is worked out each way.

It may here be remarked that this is not a system that I can recommend as either being more economical or affording more security to the workmen than the systems previously referred to, but from being able to get a great quantity of coal from a limited area at a moderate cost, where the mines are favourable to this system of working, it will probably bear favourable comparison with most other systems of getting coal.

There are many modifications of the various systems of getting coal referred to, but I do not consider any of them call for particular notice. In working most collieries it is an advantage to adopt that system of getting coal that will produce the greatest percentage of large or round coal, if it be equal in other respects, as in most places the large or round coal is worth, at a fair computation, 5s. a ton more than the small; but if the coals are filled altogether, and used in that state for engine purposes, or the small can be used for making coke, then it becomes of nearly equal value with the large coal. It may not be generally understood that small coal makes better coke than large will do, and that it is not a question of the size of the coal at all in making coke, but whether the coal contains a sufficient amount of bitumen to make coke. I have repeatedly tried the experiment, and have invariably found the coke denser, larger, and more compact when made from small coal than when made from large. It may not be uninteresting to the general reader to state the fact that the writer is acquainted with a coal field where two collieries are working in close proximity to each other, being separated by a fault, on one side of which several seams of coal make a beautiful coke, whilst at the adjoining colliery, on the opposite side of the fault, a saleable coke has not yet been made, though some scores of pounds have been spent in trying to do so. This peculiarity is not confined to the two collieries adjoining each other, but extends throughout the whole of the coal field, the coals lying south-west of the point referred to being good coking coal, whilst those lying on the north-east are entirely unsuited for making coke.

It may be considered of primary importance that the system of working a colliery be adopted that will permit of the greatest percentage of coal being wrought from any given area; or, in other words, the system that is attended with the least waste, as every ton of coal left unwrought, or wasted in any shape, may be considered as 1s. lost at the lowest computation, in some cases 1s. 6d. will be the least that may be put down. Sometimes this loss does not fall upon the lessee of a colliery, as he only pays upon what coal is sent to bank; but, nevertheless, the loss is the same if it happens to fall upon the lessor instead of the lessee.

Another important consideration in the choice of a system of getting coal is, that the system be adopted which will afford the greatest security to the workmen. Where the seams of coal are favourable to long wall working, no system of getting coal practised in this country is so well adapted for affording security to the workmen as the long wall system. In support of this statement, I can only say that I have practised this system for years, and where I have done so have not had a single fatal accident or a serious personal injury. This does not appear to be at all an exceptional case, as the Inspector of Coal Mines for the South Staffordshire district, in his return for 1856, makes the following remarks:—"If the coal were gotten in twice by long wall these difficulties and dangers would not be encountered, and thousands of tons per acre would be liberated over and above the proportion obtained by working in the accustomed manner of pillar and stall. But beyond all other results the saving of human life would be the most prominent, as is well proven in my present returns, which do not contain one single case of death in getting the thick coal by long work." It must be clear that a seam worked upon the long wall system yields a far greater percentage of hand-filled coal than any other system will do, from the fact of no nicking or cutting being required, and the coal not being crushed by being left in pillars after the narrow work has been driven. And by this process of working the whole of the coals are got out without waste, unless it be left for some special purpose; whereas most other systems of getting coal are attended with a loss of 10 per cent. upon the whole coal wrought. In some instances the cost of getting coal upon the long wall system is slightly in excess of that wrought upon other systems, but the slight extra cost is nothing in comparison to the advantages this system affords. The principal reason this system is so seldom practised is in consequence of the enormous quantities of coal required from one shaft daily, and it not affording the same facilities for supplying such quantities from the same area as some other systems do. This may be remedied in most of cases by having an extra set of workings open, either in the same or some other mine. I can cordially recommend this principle of getting coal as being more likely to meet the expectations of colliery proprietors than any other, except the modification of the long wall system, treated upon in my last paper; that is, provided the mines are suited for this method of working.

In introducing either this or any other system into a district that has been worked upon a different method than the one contemplated, it is well to be prepared for encountering the monster evil—prejudice. This may be done by the manager paying every attention to the working of the system until it becomes thoroughly established, and he has succeeded in showing the workmen that the change has been introduced for their benefit as well as that of their employers. Perhaps no class of men have greater objections to any innovations being made upon what has been handed down to them by their forefathers, but, like most other people, if they can be shown that a change is conducive to their interests, by affording them the same amount of money for less work, they will not be long in submitting to any novelty, however great it may be.

As has before been stated, much depends upon a system being well conducted whether it is successful or not, for no system, whether it be suited for a mine or not, can reasonably be expected to answer the expectations of the proprietors if everything is not done in order, and the works systematically laid out. This, of course, depends upon the manager of a colliery, and such is the difference in the manner of works being conducted, that the same systems almost lose all identity. In fact, the same difference is to be found amongst colliery managers as in other individuals, some being constantly behind, and in a state of confusion, with all that they have to do, whilst others do everything by rule, and have ample time for all their undertakings. Many seem to be unaware that a man can only perform a given quantity of work (though some may be able to perform much more useful labour than others, with less wear and tear to the system), and that all inconveniences the workmen are subject to fall upon the proprietors of a colliery, whether it is worked by piece or by day work, as in many localities at the present time a workman will have a day's wages whether he performs a sufficient amount of useful labour or not to entitle him to it, if the cause of his not doing so does not rest with himself; I briefly referred in a previous paper to the common, but very objectionable, practice of getting coal from anywhere, or in any form, in order to make up quantity; and again refer to the subject in order to say that no reasonable excuse can be offered for doing so after the works have once been fairly opened, as a fresh *recovery* may always be got ready for working before the other is worked out.

As an illustration of what this practice has done for a colliery in this district, I need only say that for several years past from 60 to 80 men have been constantly engaged in one pit keeping the wagon-roads, jig-brows, and air-courses in order, and setting timber in main wagon-roads. The workings are somewhat extensive, but nothing out of the ordinary way. This vast expense is owing to the coal being gotten in the following manner:—Levels were driven out for a short distance on each side the shaft, and jig-brows driven up to the boundary, out of which works were driven 20 yds. wide, the first at 20 yds. above the main wagon-road, and for every alternate like distance the coal was worked out from the shaft towards the boundary, and the pillars left to be worked out when the boundary had been reached. It was necessary to drive jig-brows at short intervals, to bring the coal into the main wagon-roads, in consequence of the difficulty of keeping the roads in the wide works open; at the same time coal was gotten from below the main wagon-road, in order to put the dirt in which the other workings yielded. This could only last for a time: when as much coal had been worked out of the lower side as could be, and the space filled with dirt, then it became necessary to send the dirt out of the shaft, and the dirt heaps that are now to be seen at the colliery testify that no small quantity was sent out; in fact, the quantity of dirt raised daily at that colliery exceeds the quantity of coal raised at some collieries for a like period.

I have not attempted to describe the various practices of getting coal at the same colliery, but simply given an illustration; and if I were to attempt doing so it would be a signal failure, unless it were said that where they could see an opportunity of getting a few tons in the easiest manner they availed themselves of it. Unfortunately, this is not an isolated case of getting too much coal in driving to the boundary, and leaving insufficient pillars to support the roof, whilst the subsequent operations of driving to the boundary and working out the pillars are going on. It may be asked what it has to do with any one how a proprietor works or conducts his own colliery? If so, I reply that it is the duty of every one connected with the trade to use his best endeavours to ameliorate the condition of the miner, to lessen the number of fatalities, and to give increased security to the capitalist; and thus render it unnecessary for any further legislative interference, or any greater restrictions to be imposed upon colliery proprietors, especially so when the fact is considered that it is not only for those collieries that are recklessly managed that legislative enactments are passed, but also for those where no expense is spared to render the occupation of a miner as safe and healthy as it can be in the present state of science. I avail myself of the present opportunity of saying that philanthropists may use their best efforts, and men of science their genius and ability, to discover some means of improving the condition of the miner, and lessening the dangers by which he is surrounded; but until we have a more intelligent, better qualified, and thoroughly practical body of colliery managers, and the ruinous systems of getting coal so often had recourse to be abandoned, all their efforts and good intentions will prove futile. In a future paper it is probable that some further remarks may be offered on this important subject.

When all the coal has been gotten on the rise of the shafts in the seams worked, it becomes a question for consideration whether to sink the same shafts deeper, and tunnel to the coal at a lower point, or drive a down-brow, or incline plane, down the dip of the mine, or to sink fresh shafts from the surface more upon the deep. When the coal seams lie at a high angle of inclination, and the seams are found at distances of from 20 to 80 yards asunder, it is better to sink the same shafts deeper, and tunnel out upon the deep, to meet the mines that have been worked to the previous level. This will answer for two recoveries at least. When the angle of inclination is very slight, and the surface land is very valuable for building purposes, or where the expense of sinking would be very considerable, then it may be best to drive a down-brow. But, in determining this, it should be borne in mind that the expense of winding up an incline plane is quite equal to that of winding the same distance vertically, unless the mines are almost flat. If the angle of inclination is anything more than 20°, then it is quite as expensive, taking into consideration the wear and tear of ropes, engines, breakage of tubs, expense of keeping the brow in repair, and the quantity of coal lost off the tubs during the transit up the incline. When working down-brow, the plan is sometimes adopted of driving the incline plane to the boundary on the deep, to its intended length, and working out a rank or width at the bottom, and then coming so far up brow as the width of the rank, and working out another rank, and repeating this; then the whole coal is worked out. This system may have its advantages, but I confess that I cannot see what is to be gained by this method of working a colliery; whilst getting out the under rank of coal in advance of the coal upon the rise has always had one and the same effect wherever I have seen or heard of its being tried—that of rendering it impossible to keep up the roof whilst working out the rise coal. Sometimes for the whole length of the down-brow, where it extends to 500 or 600 yards long, works are opened out at 15 or 20 yards asunder, and after being driven to the boundary are all worked back at the same time, keeping the highest work slightly in advance of that below it, and maintaining this order throughout. This system is open to the grave objection of having to keep a large number of wagon-roads in repair, and requiring a great quantity of tram-rails, the wear and tear of which is an important item in the working expenses of a colliery. The system that I should recommend is to work out a rank or width most suitable for the mine, and upon a system best adapted for it, commencing at the top of the brow, and leaving from 40 to 60 yards of solid coal parallel with the brow, on each side of the brow, for support of it. When the first rank has been partially worked out, preparations may be made for working another below it, leaving the same width of pillar for support of the brow, and this repeated until the brow has been driven and the coal worked out to its intended length; then the pillars of coal left for support of the brow may be worked out, commencing at the bottom, and working the coal out upwards. In building engine-houses and erecting masonry or brickwork in the mines, the following simple precaution will do much towards preserving the same from the injurious effects of the creep of the floors or the weight of the roof. When the first course of bricks or stone have been laid, inch boards should be put the length and width of the wall, and when every three or four courses of bricks have been added, or a like thickness of stone, another board should be put in the same manner and of the same thickness as the first; if this is not attended to in every wall that is built, when a creep of the floor or weight of the roof takes place, the walls, however strong they may be, will be cracked and broken up in every direction.

JOS. GOODWIN.

VENTILATION OF COLLIERIES.

SIR,—I have been a hard-working miner for upwards of 35 years, and am only one of the many thousands who are giving a helping hand in trying to investigate those dire accidents from explosions in the pits and mines of Scotland, with the view of providing a remedy, believing, as I do, that there is great room for improvement in at least two-thirds of them. No doubt we have a few honourable exceptions amongst the master miners—gentlemen who spare no expense for the ventilation of their mines; and I believe that they find this course ultimately to their own advantage. Of course, I cannot expect that I shall have credit for having made an improvement, except from those who have a knowledge of the system at present practised in Scotland. The system most commonly adopted in Scotland is the "long wall;" but too frequently double-doors are not used, and the arrangements are such that each time the door is opened to put material on the cage the whole supply of air to the workings is cut off. This evil I have overcome, by having one shaft solely for the return air, and two shafts for the traffic.

It is a fact worth noticing that in nearly all the pits or mines in Scotland that are wrought on the long wall system when the workings are in about 150 or 200 fms. from the bottom of the shaft they can scarcely be continued for want of air. Being convinced, as I was, that the full supply of air from the downthrow could be continuously maintained, making allowance for extra friction, and an extra number of men consuming their due proportion of oxygen, I set about to see why and where the air did not reach the face of the workings, and I found that the air was making its escape through the whole of the buildings from the downthrow to the upthrow shaft. By collecting all the smallest material, and placing it in the centre of the above buildings, and placing regulating doors to ventilate each road as required, this is easily remedied. I have a model of a self-acting door (which will save the expense of boys), that can be put up at or about the cost of an ordinary mine door.

The next great point to be overcome in the ventilation of mines in Scotland is the proper command of furnace power; 10,000 or 12,000 cubic feet per minute should be adequate to ventilate any of our mines in Scotland, still I think it would be a very rare thing to find that here. From experiments I found that when the external air was 20° below that of the internal air or upcast-shaft, and the exit 25 ft. from the furnace, that the air travelled at the velocity of 3 inches per second, and that for each 25 ft. added to the chimney-stack the velocity increased 3 ft. per second. It is upon this that I have founded my tables.* I may state that, through my practical experience, I have come to the conclusion that 10,000 or 12,000 cubic feet of air per minute is adequate to ventilate any of our mines in Scotland; while the last figure of the last line of the sixth table in my paper showeth that 23,040 cubic feet can be put into mines in one minute if required. The fact is, that any required quantity of air could be put into pits and mines as we go on increasing the length from the furnace to its exit.

With due regard for every other arrangement, as pointed out in my paper, the system of ventilating with the furnace on the mouth of the shaft in place of the bottom of the shaft has been condemned by some, and approved by others: but wherever I have seen it put into operation in Scotland it was only an at tempting of the system, as it were, of yoking a dog into a cart with a load that would have been plenty for a horse. In many cases not more than 70 or 80 cubic feet from the furnace to its exit, and in many cases the furnace fires being fed from the atmosphere on the surface in place of from the workings in the pit—thus the system was abandoned as being condemned. Let 3600 cubic feet of air be rarified to the temperature of 100°, and we will have 12,960 cubic feet of air per minute, which if properly divided into the various parts of the workings of a pit few or no accidents would be heard of in Scotland. Mr. Ralph Moore, the eminent engineer, of West George-street, Glasgow, whose name is famed throughout Scotland for ventilating of mines, took all the advantage that the furnace in the bottom of his shaft could give him in his own pit at Springbank, Glasgow. He led the return air into the engine-stack on the bank, which was a double lever power, so that he had no less than 20 different splits of air. He split his air by means of what is termed overcasts. I have in my paper, figure 3, split my air throughout the various parts of the workings by means of slate holes in doors, which if carried into effect would, I believe, be the means of preventing many an explosion of fire-damp, and thus human life and property would be less at stake.—*Newton, Cambuslang.*

JOHN GRAHAM MILLER.

* On Ventilation of Coal and Ironstone Pits and Mines (a sheet of diagrams and tables). By J. G. MILLER. Newton, Cambuslang: The author.

TREATING POOR COPPER AND OTHER ORES.

SIR,—"A Copper Refiner" tells, in last week's Journal, a very old story. Nearly three thousand years ago a very wise man said that there was "Nothing new under the sun." There are Solomons in our day, and your anonymous correspondent's sermon amply proves the truth of his text. Inventors have also an old story to tell. First, their labours are of no use, and their productions of no value. This is the first view of the case; but when the use and value have been demonstrated the ground is shifted—then comes the question of validity.

I consider, Sir, that your columns are the proper and legitimate channel for the discussion of the *utility* of any invention bearing any relation to the wide but important field occupied by the *Mining Journal*. I think I have already shown every disposition to discuss the utility of my inventions fully and fairly, and I acknowledge your liberality in allowing me so to do. I must, however, decline to enter into any controversy with an anonymous writer on a purely legal question, and which can only be decided before competent judges in a court of law. I should hope, however, to have for a jury a very different class of men to "A Copper Refiner," whose verdict seems to me to resolve itself into this—"What parts of it that I appear to understand is not new, and what I do not understand must be absurd."

Alderley Edge, July 22. WM. HENDERSON.

THE IRON ORES OF NEW ZEALAND.

SIR,—The mineral wealth of our Australian colonies have proved so highly important, and so thoroughly remunerative to those engaged in its development, that ample ground is certainly afforded for anticipating that English capital will not be sought in vain for the testing of the enormous deposits of iron-sand in New Zealand. I have observed that several patents for the treatment of the titaniferous iron-sand have been taken out by Mr. Robert Mushet, of Coleford; and I also hear that a company is in embryo for working the deposit, but concerning the progress which has been made, or the probability of success, it seems difficult to ascertain any particulars. As I can see no reason why a company for making iron in New Zealand or in New South Wales from New Zealand ore should not prove successful, I have carefully perused Mr. Mushet's patents bearing upon the subject. As he has a very large number of patents, several of which would, I think, alone accomplish all that is required, though his processes are usually complicated; and as it is sometimes difficult to distinguish one patent from another without referring to the number and date, it will suffice to describe his patent No. 3010, dated Dec. 8, 1860. He commences by stating that the ore which he proposes to treat—the titaniferous iron-sand—is found in immense quantities at Taranaki, near New Plymouth, in New Zealand, and consists essentially of titanic acid combined with oxide of iron. From the further perusal of his specification, it appears that a difficulty arises in smelting this sand, owing to its tendency to fall and choke the hearth before it has been properly reduced. To obviate this difficulty Mr. Mushet proposes the addition of bituminous or resinous matters, which are to be mixed with the iron-sand, and then the compound broken up for smelting.

Now, although Mr. Mushet has the advantage over me, that he is a practical man and I am not, I think the difficulty with respect to the sand falling could be remedied by a much simpler method. Some time since Dr. Gurit, a German, proposed a diagonal furnace, which I understood would not answer because the materials being smelted would not come down. As Mr. Mushet wants to avoid just what Dr. Gurit avoided too much, I should think the diagonal furnace would be very valuable for the New Zealand ore. Again, it would not always be easy to obtain the substances he names in New Zealand; and to bring iron ore from New Zealand to England would, I should think, be anything but remunerative; but by the use of the diagonal furnace the ore, which Mr. Mushet describes as very pure, could be smelted with the fuel at hand, and a fine description of charcoal steely-iron brought into the English market. If the Taranaki Iron Company propose to bring the ore to this country, I should think few would be thoughtless enough to embark in the speculation; but if it be intended to smelt in New Zealand there is every chance of profit. I think Mr. Mushet will agree with me in this; and if he can make any use of the suggestion to apply the diagonal furnace he is welcome to it.

July 23. NEW ZEALANDER.

NORTH WALES SLATE QUARRIES—No. VI.

SIR,—The scenic beauties from Bettws to Dolyddelen are proverbially grand; and were it necessary to attest the truth of this affirmation, the hundreds of artists from all parts that resort hither is an ample confirmation. Over the River Lledr is a fine iron bridge, built in commemoration of our victory at Waterloo. This is a splendid span bridge crossing the river, making a junction of the counties of Denbigh and Carnarvon. The road from this place is well macadamised, and in a fit state to admit carriage travelling. The distorted, mountainous, and rocky aspect of the road is very fine up to Dolyddelen. The traveller is struck with the novelty of the scenes which present themselves with such order and rapidity to his view, making the repetitions and diversities more like dissolving views than actual realities; the transitions of mountains, rocks, elevations, and chasms having no parity of perspective in the Principality.

CASTLE QUARRY.—This has been extensively worked for many years, and that to a great profit, especially when conducted by one already alluded to in these papers. This vein dips a few degrees from the perpendicular, and is of a black colour, but is as lasting as any slate in Wales. The blocks are of good sizes, and will yield an extraordinary quantity of slates, owing to their unsurpassable cleavage. Several parties have had their run with this quarry, but owing to various deficiencies few have got out the better for it, after its long days of prosperity alluded to. Branches from the range of hills on the right side of the quarry have so much contorted this vein in front of the workings that no good can be expected from it for at least 400 yards towards the farm-house of Penrhiw. A tunnel of good length was driven to test it, but the vein is in the same confused state all along. When inspecting this quarry I carefully examined the contortion, and endeavoured to satisfy myself and one of the proprietors on the spot as to the cause of it. There are two branches extending from the great range on the right, and boldly pressing on the slate vein between the entrance to the tunnel and Penrhiw; and evidently, from the appearance of the slate on the Ffestiniog road, has, to a certain degree, removed the vein from its regular run, and all that portion is more or less injured. A small trial has been made on the brow of the hill, but too near the disturbance to prove remunerative. I have traced this vein, with fine out-croppings, up to Hendre, at which place it has been wrought; but, strange to say, the best part of the vein, without a shadow of doubt, has been left untried to the present day. The key to it, and the only part that can be developed properly and advantageously, lies near Rhiadr-y-Coblin. This vein above Hendre is covered by trap rocks; but a little distance higher it crops out for hundreds of yards, whilst the trap rocks run ruggedly and boldly towards Merioneth. The vein is greatly compressed, and is very thin, compared with its width at the valley of Dolyddelen; and as it runs higher to the rocky wilds it is entirely lost among their twistings, upheavals, and down throws,—so irregular, yet grand and sublime in the highest degree. I particularly noticed one place, where the slate for several yards was twisted like the letter S.

FRON-HAUL.—This is situate near Pentrefaelas, in Denbighshire. I got instructions to examine this place, which was reported to be one of the finest of slate discoveries. There is an open-cut of a few yards in length, the further part of which was alleged to be in the finest of quality. But of all the places I ever saw, and they are not a few in number, most decidedly this is the most unlikely to produce slates; they will neither split, pier, nor rhyse. When the contents of my report were made known to the puffing projector, he called me by every name that infernality could suggest, and had he ransacked the dictionaries of the bottomless pit for foul words it is doubtful whether his supply could have been ampler or readier. Nothing would satisfy or convince this great authority that it was *not* "the finest of slate quarries." In consequence of his unconvincible nature, two conductors of long experience and celebrity were afterwards called in to inspect it, who condemned it, until its particles be arranged and its composition modified, by chemical actions, molecular, magnetic, or by the influence of the earth's internal heat.

THE PENMACHNO DISTRICT.—This has been known to the public for a number of years, both as a mining and a slate locality. To an inexperienced eye the greater part of the vicinity might be mistaken for slate. The rocks here do not appear to have any connection with the great upheaval of Snowdon. The uplifted rocks of this part seem to be connected with another uprise, which shall again be noticed. The slate veins found in the Snowdonian rocks dip a few degrees from the perpendicular,—witness those of Llanllyfni, Llanberis, Pant Dreiniog, Bryn Penrhyn, and all those reported in these papers, excepting the black slate veins covered by trap rocks. Henceforward for weeks I shall have to do with slates which, lying under 45° angle, may with propriety be termed seams.—*July 24.*

CYMRO.

THE LIVES OF MINERS.

SIR,—It is with considerable interest that I have read the articles in the Journal relative to the lives of miners, &c. It is greatly to be deplored that miners, as a class of men who deserve the true sympathy and interest of the philanthropist, should still remain passive sufferers of the calamities incident to their perilous employment.

The life of the copper miner is one great suicidal effort. Many of his misfortunes are irremediable, many may be modified, and some corrected, but we must not calculate upon a large amount of sympathy or assistance from the needy adventurer, the body of the miner being part and parcel of his stock in trade, and therefore laid out to the greatest advantage, minifying all expenses not absolutely necessary. There is no labour within the whole range of arts or manufactures so destructive to human life, none attended with so much wear and tear of the physical system, and perhaps none less remunerative. No decrease in the excessive rate of mortality can be reasonably expected until two abuses are repealed, both of which might be effected without additional cost to the adventurer, and afford incalculable benefit to the miner.

The first is "tribute." As a rule, the tributer risks his labour, stakes his hope, health, honesty, and reputation upon blind chance, which in 85 cases out of every 100 is dead against him, independent of the survey of the careful agent; yet the infatuated tributer works on night and day, month after month, drawing heavily upon hope. Living upon credit, his wife and family in poverty and rags; his system becomes exhausted from want and hard work, he looks prematurely old, disease overtakes him, he dies of consumption and in debt, bequeathing his family as a parochial burden. This is a practice destructive alike to honesty and legitimate labour; a species of gambling, ruinous in its consequences, and fatal in its tendencies to the welfare of the rising generation.

The second is the administration of medical relief, or rather its mal-administration. This is one of the great causes of the high rate of mortality among miners. There are

many facts in connection with this abuse, which under any other circumstances would be recognised as criminal neglect; but in the case of the poor miner are allowed to pass on without the privilege of a challenge, which would be accorded to the friends of the dying pauper by the way side. This is an evil which only requires exposure to bring its own remedy, I trust. It is difficult to understand how two medical men can undertake the administration of medical relief to 1920 men and 318 women, besides a full private practice which occupies two-thirds of their time. Hundreds of men live from three to four miles from their work; when they arrive at the mine they are commonly in a state of prespiration—always in a more or less heated state. They at once strip, put on their underground clothes, sometimes wet with the poisonous water of yesterday, descend 200 fms. by hand, work their "stem" of eight hours in a close end, where the candle goes out from want of air, and the stifling powder-smoke scorches and blisters the mouth and throat like burning surphur. They re-ascend their 200 fms. almost in a vertical direction, walk to their homes, and make a meal off food of the coarsest and most inferior description. All this goes on daily; diseased action at length sets in, goes through all the primary stages without a check, and the case which in the agent would have almost hourly medical attention, in the poor miner receives the visit of a bewildered apprentice, and the benefit of his inexperience. Interest gives the doctor 1920s. monthly, and it is his interest to spend as little of that as possible upon the miner. Thus, one by one they drop away, disappear, and are replaced by others, who in turn fall victims to a life of slavery, poverty, and disease.

The question is an open question, a vital one, a Christian one, and only requires to be fully brought before the world so that the suffering of the miner may be understood, when there can be no doubt that remedies will be suggested which are both practicable and beneficial.—*Redruth.* JUSTICE.

Referring to this communication, a correspondent of the *West Briton* remarks—"In describing, as your correspondent forcibly does, the misery and wretchedness of the consumptive tributor and his ragged and half-starved family, he has taken no notice of the *fund* which, if properly invested, and put to its legitimate uses, would have been sufficient in a great measure for the support of the poor man and the helpless part of his family. I allude to the *club*, to the support of which I believe *every man, woman, and child on a mine is more or less a contributor!* I was told to-day, on what I cannot but consider reliable authority, that but a very few years have elapsed since 1200*l.* was taken from a similar fund in an old established mine in this neighbourhood, and applied to the *uses of the mine*, leaving a considerable surplus still in the purser's hands for contingencies. I am informed, but I can scarcely credit it, that there are adventurers in mines who say that the club money does not belong to the workmen but to the adventurers. Did those persons ever see a 'bal bill?' Amongst the items deducted from the workmen's earnings, whether he be a tributer, tutworkman, workman, or woman of any description, will be found doctor and club, as well as smith-cost, powder, safety-fuse, and the like."

THE MINERA LEAD DISTRICT.

SIR,—Taking advantage of the present dull state of the market, I have devoted a few days in looking over the Minera lead district. With regard to the celebrated MINERA MINE, the large monthly sales of lead, amounting from 450 to 500 tons, are sufficient to show the magnitude of this mine. The cost, however, for returning this quantity, being some 4000*l.* to 5000*l.* per month, we are informed, absorbs a large portion of the proceeds, hence the comparatively small amounts paid in dividends to the shareholders on the current price of the shares. The reserves of lead are stated to be very large, and sufficient, without any further discoveries, to keep up the present returns for many years to come.

Next in importance to the Minera is the NORTH MINERA MINE, which is opening up splendidly. Those who have not, either through their agents or themselves, inspected the underground prospects have not the least conception of the prospective value of their property. There are good reserves of lead in various parts of the mine; and during the past week a new branch of lead has been discovered in the 35 yard level, which will produce several tons per fathom. Without any exception, it is the finest deposit of lead I ever remember to have seen; how long it will continue is, of course, premature to say, although it is the opinion of practical men that the best part of this new discovery has not yet been seen. Until within the last few weeks the only means of returning the lead fit for market was by manual labour, hence a large quantity of ore has been accumulated both underground and at surface. Now that the steam crusher has been set to work this accumulation of ore is being returned; 50 tons have just been sold, and it is intended, I believe, to have regular monthly sales, which, no doubt, will result in a profit to the shareholders. Everything at present indicates a long career of prosperity to this company; and although it would be invidious to compare North Minera with some mines that are selling at a much higher price, without having the least pretensions to its prospects, I am bold to say that, taking all the chances presented by North Minera into consideration, no one who buys into it at the current price can scarcely sustain any loss, while the prospects of realising a large profit by-and-bye must be quite apparent to everyone who is acquainted with the mine.—*July 25.* EDWARD COOKE.

WEST CARADON.

SIR,—I am at all times prepared to defend the course which I adopt in managing the mines under my control, but I never think it worth my while to reply to any communication which a person is afraid or ashamed of putting his name to. If the writer who alludes to this mine in your last impression, and who is reported to be a "respectable man," will subscribe his name, I am fully prepared to lay the present mode of working the mine in question before the public, and compare it, in every respect, with either South or East Caradon. Whilst I have no wish to quarrel with my neighbours, I do not flinch from any one as to the legitimate and efficient working of a mine.

Redruth, July 22. FRANCIS PAYOR, Manager.

THE THREE CARADONS—SOUTH, EAST, AND WEST.

SIR,—I observe in last week's Journal, under the head of Mining Notabilia, an article on the three mines above-named, and the only conclusion I can arrive at is that West Caradon is the only mine of the three that is worked solely for the interests of the shareholders, not having any regard to agents' salaries, or the supply of materials, either direct or indirect. There can be no doubt of South Caradon being a good mine, and worked on the principle of setting short stents to tutworkmen to drive so much and no more, to rise so much and no more, which is, in my opinion, the very plan for making agents idle, and letting them know their places are safe for life, and without any trouble or anxiety to themselves. Had East Caradon been wrought with the same energy as West Caradon, the poor tired-out shareholders, who sold out their shares at 3s. 6d. per share, would long since have been in possession of the valuable but unexpected prize. During the last three years, under the present management, West Caradon has divided, from discoveries made, about 160*l.* per 256th share; and I should like to know what right the manager would have to keep this ore unsold during the period of the late high standard of copper, when it could never be taken away at better advantage, or to more profit to the shareholders. Had this ore now to be taken away, there would be at least a loss of 1*l.* per ton, or 640*l.* bi-monthly, besides the interest of the money in the shareholders' pockets. The same rule of mining has been applied by the Messrs. Davey, of Redruth, who paid such large dividends in Wheal Buller in a short period. Had those gentlemen made smaller monthly returns, and extended their dividends over a much longer period, a great portion of the money which has been divided would have been swallowed up in agents' salaries and the fixed expenses of the mine; but, like the manager of West Caradon, having due regard to the interests of the shareholders, and the expeditious and economical working of the mine, they divided the profits as early as possible among the proper persons—those who had invested their capital in the mine.

The respectable agent referred to might have put his name to his report, and if done to guide his employers alone, would not think it worth his while to publish it with a view of injuring the value of the property. A SHAREHOLDER IN WEST CARADON.

July 24.

MERLIN HILL AND PANTYGLEIEN MINES.

SIR,—Your articles on the Merlin Hill and Pantygleien Mines have done good service. I can bear testimony to their scrupulous accuracy in nearly every particular; if you err at all, it is in understating the mismanagement—costly mismanagement—which has brought these at one time promising undertakings to the verge of ruin. Your second article caused a great stir, and was the topic of conversation here for several days; and, I am glad to say, has led to a revision of the expenditure, which has been reduced to the lowest possible amount, but I am sadly afraid it is too late. What a pity these mines were not dealt with in a different spirit. I have watched them with much interest, because I felt that upon their success the mining enterprise of this part of Wales, just beginning to show itself, was dependant. The lode at Pantygleien was of a most kindly sort; but it ought to have been known that a mere scarifying of the surface was not the way to find the ore, which probably is to be found in depth only. I am told that the lode has been cut in the 10, driving south. I have been shown portions, and find it composed of spar, carbonate of lime, and clay-slate, decidedly plumbiferous. I have not the slightest doubt that the lode will prove valuable in depth.

In the management of these mines you charge the company with certain defects, and you are backed by some of the directors and shareholders, who tell me they are prepared to endorse all you have said, and are very thankful to you for the manner in which you have treated the subject. But I must exculpate Capt. S. Harper, who has the nominal superintendence of the works, from the blame which, at first sight, you attribute to him. Capt. Harper has been hampered in a thousand ways, and unable to carry out his own plans. Everyone knows the difficulties of a captain hunted perpetually by directors ignorant of mining operations; and I am informed that Capt. Harper has not been free to act upon his own responsibility, and is not, therefore, chargeable with the faults which occur in these mines. I can speak confidently, that a more competent and honourable captain cannot be had; his reputation is high and untarnished in this district. I think it right to say this in vindication of Capt. Harper, who is probably not personally known to you.—*Carmarthen, July 25.* W. J. MORGAN.

THE SOUTH EUROPE MINING COMPANY.

SIR,—There have come to hand the "statement showing the income and expenditure for the year ending June 29, 1861," and also the "balance-sheet, June 29, 1861."

By the latter it appears that the cash received from the shareholders for the year, up to June 29, 1861, was	£5744	10	0
But by the former that the amount was	5644	10	0
Difference	£100	0	0

Notwithstanding this difference of 100*l.* against the shareholders, both the statement and the balance-sheet balance, and do not show the error or explanation.

By the balance-sheet, "preliminary and three years' expenses of offices, management, &c." is	£3188	4	6
By the statement, the preliminary charges for 1861 are	300	0	0
By the balance-sheet, expended on the mines in Spain	7785	2	6

So that the preliminary charges still continue, though the company has been in existence above three years, and that the total amount of such preliminary expenses paid by the company amounts to nearly one-half of the whole mining operations of the company, extending over a period of more than three years.

The law costs are put down at 49*l.* 16s., also a questionable item. The notice of the last call, made on August 3 last, stated that it had been made in order to meet payments consequent on the discovery of *ore* which had just taken place at the eastern portion of the Buitron Mine. Now, although a year has elapsed since the discovery, yet no mention of ore, either in "heap" or sold, appears in the account. But the melancholy fact is, that the accounts show that another call, which will be the last, is impending.

July 25. A SHAREHOLDER.

HOLLOWAY'S OINTMENT AND PILLS—HIDDEN AILMENTS.—How many persons suffer from disease for which, through bashfulness, no relief is sought, till their strength of constitution is sapped? The headache, deranged digestion, and dull pains in the back and liver, attendant on these maladies, may be safely and permanently cured by rubbing in Holloway's ointment, and regulating the system with his pills. All diseases affecting the lowest bowels, which are so troublesome and so weakening, may thus be cured without consultation, and without vexing explanations. The swellings soon subside, and ease succeeds. Holloway's universally esteemed pills and ointment are equally suitable to both sexes, at all ages, and in any climate. Full instructions for their use accompany each packet of these medicaments.

Meetings of Mining Companies.

WEST WHEAL TREVELYAN MINING COMPANY.

A general meeting of shareholders was held at the company's offices, George-yard, Lombard-street, on Wednesday,—Mr. F. R. WILSON in the chair.

Mr. J. WATSON (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts was submitted, from which the following is condensed:—

Balance last audit	£	5	11	11	
Calls received	615	14	6		
Ore sold	248	7	1	£869	13 6
Mine cost, April	£249	9	3		
Ditto, May	315	17	1		
Merchants' bills	118	16	3		
Royalty	50	12	0		
Sundries	3	10	0	738	4 7
Leaving credit balance				£131	8 11

The balance of liabilities over assets was 292*l.* 14s. 8d.

The report of the agent was read, as follows:—

July 19.—The 58 is extended west of the shaft altogether 22 fms.; at the present end we have cross-cut the lode, where it is full 6 ft. wide, composed of quartz, &c., with occasional stones of ore; this is about 5 fms. behind where there is a very good lode going below the 48; driving by six men, at 4*l.* per fm. The 48 is extended west of the shaft 66 fms.; the lode in the present end is 2 ft. wide, composed of quartz, &c., with occasional stones of ore, a very kindly lode; driving by four men, at 4*l.* per fm.; at this level we have driven through 35 fms. of good orey ground. In the 27, west of the shaft, we have sunk a winze 2½ fms.; the lode is 2 feet wide, yielding good work, and worth for copper 10*l.* per fm.; sinking by six men, at 4*l.* per fm. We are stoping the back of the 48, by eight men and one boy, where we have a good lode, worth for copper 12*l.* per fm., and stoping at 2*l.* 15s. per fm. We have another stope working to the east, by four men, at 2*l.* 15s. per fm.; the lode is worth 8*l.* per fm. The 28 cross-cut is extended north of the main lode 35 fms., in which we have discovered a small branch; the ground is of a very good killas for exploring, and we calculate we have about 30 fathoms more to intersect Fryor's lode; this we intend to push on as vigorously as possible, because the lode in the back presented a very good gossan; driving by four men, at 6*l.* per fm. We have two pitches working, at 12s. in 1*l.*—Park Lode: We have extended the cross-cut south about 14 fms., but we have not yet discovered anything worthy of note; driving by four men, at 5*l.* per fm. The number of hands employed are—underground, forty-three men and two boys; at surface, ten men, twelve girls, and three boys. We sold on the 11th inst. 553*l.* 16s. 10d. worth of copper ore, and we calculate that during the present three months our sale will exceed the last. In conclusion, we beg to remark that, seeing that in every level as we go down the orey ground is lengthening, it is absolutely necessary to resume the sinking of the engine-shaft below the 58 forthwith; and, again, seeing that we have a good orey lode going below the 48, it does indeed look very favourable for the 58 opening up some good orey ground. —G. R. ODGERS, JOHN D. OSBORN.

The CHAIRMAN, having moved the adoption of the report and accounts, congratulated the shareholders upon receiving the most satisfactory balance-sheet that had been presented for a long time upon the prospects of the undertaking which were also much more encouraging. He was glad to say that their inspecting agent, Capt. Odgers, was present, who would be happy to afford any information shareholders might require.

The SECRETARY, in answer to a question, stated that at the special meeting, held for the forfeiture of shares in arrears of call, there were only 10 shares forfeited, the remainder having been redeemed by the payment of the arrears.

Capt. ODGERS, in answer to questions, stated that he estimated the returns for the current two months would be increased to 65 tons, and they looked forward for an improved standard, which, from the ore being very rich in quality, would have a considerable effect upon the value of their returns.

Dr. M'CRAE enquired the distance they had to drive to reach the Park lode?—Capt. ODGERS replied it would be reached in about 18 fms. driving, but already a tin branch had been cut.

The SECRETARY enquired if Capt. Odgers attached much importance to the cross-cut going to intersect Pryor's lode?—Capt. ODGERS replied that he regarded it as a point of some importance, from the fact that the back of that lode was very strong, with good gossan and quartz, quite equal, indeed, to Owen Vean lode.

The CHAIRMAN enquired if the present drawing and pumping-power were equal to the requirements of the mine?—Capt. ODGERS replied that it was quite sufficient to take them down to the 68. In the 48 they had driven through 35 fathoms of orey ground, averaging in value fully 7*l.* 10s. per fathom, which could be stoped away at 55s. That was a very important feature, for it was upon the same lode as that from which the celebrated Owen Vean, which adjoins West Trevelyan, made its riches. It was an encouraging feature, too, that as depth was attained the length of the ore ground extended. For instance, in the 20 the ore ground was not more than 3 fms., and in the 30 not more than 6 fms. in length, but at the 48, as he had before stated, the ore ground had extended to 35 fms. in length. The winze sinking below the 48 had cut a good lode, the ore still appearing to dip west; that winze was upon the eastern part of the bunch of ore.

Dr. M'CRAE enquired if they had got under the orey ground in the 20, of which such special mention was made at the time?—Capt. ODGERS said that was the point to which he had been calling attention. In the 20, as he had stated, it was not more than 3 fms. in length, but it had gradually increased in depth until, at the 48, it was 55 fms. in length.

The SECRETARY enquired when it was calculated the ore ground in the 58 would be reached?—Capt. ODGERS replied that they had some 3 or 4 fms. to drive, but as the ground was very easy, he thought the ore ground would be reached in about five weeks. They fully expected that the orey ground in the 58 would assist them very materially.

The SECRETARY remarked that they had always regarded the 58 as a very important point; the corresponding level in the adjoining mine of Owen Vean having been the richest in that mine.

Dr. M'CRAE enquired if Capt. Odgers looked favourably upon the prospects of the mine?—Capt. ODGERS replied that the mine had not looked so promising for at least the last twelve months. The development of the 48 had thrown a most important light upon the prospective value of the property—so important, indeed, that if they cut anything of consequence in the 48 going west he should instantly urge the commencement of the sinking of another shaft; as by the present shaft they had to drive through a considerable length of dead work before reaching the ore ground. He would go as far as to say that if they cut a kindly lode in the 48 west, and an improved lode in the 58, it would be imperatively necessary that another shaft should be sunk considerably further west than their present shaft. He should recommend that it be commenced about 66 fms. west from their present shaft, as it would then go down into the very heart of the ore ground.

The report was then received and adopted, and the accounts passed and allowed. Upon the question of the resumption of the sinking of the engine-shaft being introduced.

The CHAIRMAN enquired what additional monthly cost would be incurred by resuming the sinking of the engine-shaft?—Capt. ODGERS replied that the estimated extra cost would be about 30*l.* per month.

Dr. M'CRAE was of the opinion that, if their present prospects justified the assumption that the mine would prove remunerative, the sooner the sinking of the engine-shaft was resumed the better, whatever might be the additional cost incurred.

A SHAREHOLDER suggested that the 28 cross-cut north should be suspended, in order that the men might be employed to sink the engine-shaft.

Capt. ODGERS said that he regarded the 28 cross-cut north as an important point, and if either cross-cut were to be suspended, he would rather it be that on Pryor's lode.

It being agreed that the matter should be left in the hands of the agents, a resolution was passed that the sinking of the engine-shaft below the 58 be resumed.

Capt. ODGERS, in answer to a question, stated that their last sampling averaged 11 per cent. for copper, which was far above the average of the county, and that had it not been for the fall in the standard their financial position would have been improved by about 120*l.* He might also inform the shareholders that the ore they were at present raising was fully of the same quality.

Mr. VANCE considered that their prospects, upon the whole, were very favourable.

The SECRETARY enquired what quantity of ore they had at present at surface?—Capt. ODGERS replied between 20 and 30 tons, the whole of which had been raised since June 25, the day of their last sampling: and the whole of it had been taken from one level—the 48.

The CHAIRMAN enquired if the stopping of Wheal Trevelyan pumping-engine was likely to increase the water at West Trevelyan? He asked that question the more particularly because he had heard an opinion expressed that their property would be seriously affected by it.—Capt. ODGERS said it was utterly impossible to affect them much, for the only level, the 28, whence the Wheal Trevelyan water could reach them had been securely kept back by powerful dams.

Mr. VANCE enquired what were their prospect in the eastern part of the mine?—Capt. ODGERS said they had driven a great many levels eastward, but no satisfactory result had yet been achieved. From the 28 and 38 they had risen a good deal of ore, but unfortunately there was too much "red" ground in it.

Dr. M'CRAE enquired if in former times there had been any important discoveries made in the immediate district?—Capt. ODGERS said that in the immediate district there were several important mines, which had been celebrated for their richness. For instance, Owen Vean, which adjoined West Trevelyan immediately to the west, had been extraordinarily productive; and it could not fail to be satisfactory to the shareholders to know that in West Trevelyan they were at the present time working upon the very same lodes that had in Owen Vean produced so much wealth. At one time the district was proverbial for its richness.

A call of 3s. per share having been made, a vote of thanks to the Chairman was passed, when the proceedings terminated.

CUMBERLAND BLACKLEAD MINE COMPANY.

An extraordinary general meeting of shareholders was held at the company's offices, Gresham House, on Tuesday, to consider the propriety of winding-up the company voluntarily, and to take into consideration a proposition for forming a new company.—Upon the proposition of Mr. BALCOMBE, seconded by Mr. JOHNSON,—

Mr. N. LINDO was called to the chair.

Mr. TREGONING (the manager) having read from the *Mining Journal* the notice convening the meeting, the CHAIRMAN said that the notice just read imported that there was a very important object for the consideration of the meeting, and it was one which deserved the very best attention on the part of the shareholders. The directors had deemed it their imperative duty to convene the present meeting, to take the opinion of shareholders upon the propriety of winding-up the company under the Joint-stock Companies Act. The directors were induced to submit that matter from the circumstance that the debts and liabilities were about 1050*l.*, and that the only assets in hand was a very small sum in the hands of the bankers. Before submitting the resolution, he had to inform proprietors that some "wad," the company's property, had recently been sold under a judgment obtained by Mr. Eales—a person, he believed, who was well known to most of the shareholders. That "wad," he might mention, had been sold, or rather sacrificed or given away, for it was sold for 3s. 6d. per lb., being worth at least 30s. to 40s. per lb. Of course it was a forced sale, and the auctioneer himself was unable to test the value of the article sold. The property was sold under the execution which had been issued by Mr. Eales under the judgment which he had recently obtained. That judgment had engaged the very serious attention of the board for a considerable time past, and it was thought at one time that they would urge their grounds against the enforcement of that claim against the company, but, after mature deliberation, it was deemed to be imprudent to take such an expensive course, the issue of which being of a doubtful character. The claim of Mr. Eales was for 350*l.*, in respect one year's salary which accrued up to April last, besides 85*l.* for costs; in addition to which they were indebted to their solicitor for something like the last amount for costs due to him. By the call of 10s. per share recently made the amount called upon the paying shares was 3*l.* 10s. per share, and the sum yet to be called up upon the paying shares was totally inadequate to meet the claims against the company. Then they had the contingent liability of Mr. Eales's salary, for at the present moment Mr. Eales stood in the position of the manager of that company, at a salary of 350*l.* per annum—that, however, could not be determined sooner than April next, when they would have to give six months' notice prior to Oct. 5 for his engagement to close April 5, 1863. Taking these matters into consideration, the board felt there was no alternative but to wind-up the present company, and meet the claims and demands upon it by the distribution of its assets. They were, doubtless, aware that a large number of shares, something like 1400 or 1500, had never been issued. The board had considered whether it would be possible to issue those shares, so as to put the company into something like a respectable position; but they felt satisfied that, in their existing embarrassed state, such an attempt was utterly useless; and, therefore, they came to the conclusion there was no other alternative but to wind-up the company, in order to extricate it from the difficulties with which it was now beset, and it would at the same time be the most ready, and undoubtedly the most certain, means of ridding themselves of that incubus of the company—Mr. Eales's engagement. Although the board had come to that conclusion, they would be glad to hear if any other course were open, or if anything else could be suggested.

Mr. BALCOMBE thought a balance-sheet should have been presented, made up to the present time.

The CHAIRMAN said there was a balance-sheet made up to the end of June, by which it would seem that there would be a balance, after payment of the company's debts—exclusive of the accruing liability of Mr. Eales's claim—in favour of the company of 435*l.*, that was taking into account 775*l.*, the remaining 1*l.* per share upon what were called the paying shares.

Dr. RIDING enquired if the claim of Mr. Eales would be at an end when the present company was wound-up?—The CHAIRMAN replied it would be the duty of the liquidator to come to an arrangement with Mr. Eales, who, while he continued to receive a salary from the company, had certain duties to perform, which it was their intention most certainly to enforce against him.

Mr. BALCOMBE said that Mr. Eales had commenced his second action for 350*l.* without the directors pleading to the action by setting off the calls upon his shares against his claim. The directors had had the opinion of Mr. Wordsworth and of Mr. Tapping, that the shares held by Mr. Eales were liable for 4*l.* or 5*l.* per share, as the case might be; and in the next place, the directors had allowed a certain portion of the company's "wad" to be taken in execution and literally given away. If the present company were wound-up in the Court of Chancery, he was strongly of opinion that their balance-sheet instead of showing a deficiency would show a considerable sum to the good.

The CHAIRMAN then moved—"That, taking into consideration the embarrassed position of the company, and the inadequacy of the assets to meet the liabilities, this meeting is of opinion that the company should be wound-up voluntarily, under the Joint-Stock Companies Act of 1856 and 1857; and that the requisite steps be taken for that purpose."

Mr. BALCOMBE seconded the proposition, which was put and carried unanimously, when Mr. E. W. Yarrow was appointed liquidator, with the powers and subject to the conditions contained in the Act.

A formal resolution was then passed, to the effect that an extraordinary meeting be held on Aug. 29, for the purpose of confirming or otherwise the preceding resolutions.

This having concluded the business of the meeting, so far as the Cumberland Black Lead Mine Company was concerned, a long discussion ensued as to the formation of the new company, when, the necessary documents having been signed by the required number, propositions were submitted to the effect that the offer made by the representatives of the Borrowdale Black Lead Company (limited), for the purchase of the lease, agreement of lease, machinery, and materials on the mine entire, for the sum of 17,500*l.*, such sum to be paid by 3500 shares of that company, of 6*l.* each, be approved, and that such sum of 17,500*l.* be applied to the payment of the sum of 5*l.* per share, on each of such shares, the liquidator to be specially authorised to accept such shares in full payment, and to give immediate possession of the mine to such Borrowdale Black Lead Company forthwith. Such 3500 shares to be allotted, *pro rata*, to the existing proprietors of shares in the old company for acceptance, individually, on or before August 29, but that the right to claim such allotment shall cease upon that day.

A vote of thanks to the Chairman terminated the proceedings.

LADY BERTHA MINING COMPANY.

An ordinary general meeting of shareholders was held at the company's offices, St. Helen's-place, on Thursday,—Mr. J. E. UPTON in the chair.

Mr. G. LAVINGTON (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts showed—

Balance last audit	£	84	15	9	
Received for copper ore sold	727	16	3		
Mundic sold	74	6	0		
Received for carriage	147	13	11		
Calls received	533	4	10	£1567	16 9
Mine cost, March, April, and May	£1192	19	7		
Committee	14	0	0		
Merchants' bills (paid)	43	7	8		
Discounting ore bills	3	12	7		
Capt. Nancarrow, inspecting mine	5	5	0	1259	4 10
Leaving credit balance				£308	11 11

The balance of liabilities over assets was 1145*l.* 17s. 8d.

The report of the agent was read, as follows:—

July 23.—During the past quarter our progress in the bottom, or 53 fm. level, east of the cross-cut, has not been equal to our wishes, in consequence of hard ground, and also intersecting the cross-course, which has been hard and very troublesome for cutting through, and letting down large quantities of water; we have gone through one part of it, about 3 feet wide, and are now cutting into the other portion, and hope to get through it shortly, and extend the level eastward on the course of the lode towards the shoot of ore gone down below the 40—this end is being driven by six men. In the same level west we are driving on the south side of the lode, where the ground is moderately easy for progress, being a light-coloured killas; we have yet several fathoms to extend this end before we may expect to reach the ore ground gone below the upper levels—four men are employed in this end. In the 41 east we have just commenced cross-cutting the lode, where we think it is large: so far as seen, it is composed of quartz, mundic, and spots of ore. Looking at the dip of the ore ground in the level over, we may expect a change for the better in this place very shortly—four men are here employed. In the back of this level west we have a tribute pitch at work, where the lode is very large, quite 9 feet wide, consisting of quartz, peach, mundic, and ore, worth 8 tons, or 30*l.* per fathom; the men here employed will we expect break about 60 tons of ore during their take. The stopes in the back of this level, and east of Odgers's rise, continue to look pretty well; the lode is about 4 feet wide, composed of peach, mundic, iron, and ore, worth of the latter quite 4 tons, or 20*l.* per fathom; we have a piece of good stoping ground here. The lode in the 30 is about 2 ft. wide, carrying mundic, peach, and stones of ore occasionally; we propose driving north a short distance here for the purpose of intersecting another branch, or portion of the lode, which we think is still standing in that direction—six men are engaged in driving this end. The lode in the stopes in the bottom of this level is from 3 to 4 feet wide, composed of peach, mundic, and ore, worth of the latter 3 tons, or 12*l.* per fathom. The winze sinking below the bottom of the 30 west is just communicated with the stopes below; at this point the lode presents very favourable appearances, being about 2 feet wide, composed of ore and mundic, worth of the former 3 tons, or 18*l.* per fathom. We believe we have here now a valuable piece of ground laid open for stoping. In the 20 east no lode has been taken down lately, when we last cut into it it was composed of quartz, iron, mundic, and peach, intermixed with a little ore—four men are driving this end. In the 10 east the lode is fully 4 feet wide, with regular walls, composed of peach, mundic, quartz, black, grey, and yellow copper ore, intermixed with green carbonates; it is a very kindly end indeed, worth from 8*l.* to 10*l.* per fathom, and from its present encouraging appearance we have every reason to anticipate a greater improvement in this place shortly. This point is of great importance, as it should be borne in mind that, although it is called the 10, it is actually more than 25 fathoms from the surface, and is going in under the hill towards the great cross-course, where deposits of ore may be expected. In the tribute department I do not know that we have anything particular to communicate; some of the pitches are looking pretty well, and producing a fair quantity of ore. We have 11 pitches at work, at an average tribute of 12s. 6d. in 1*l.* In consequence of the depressed state of the metal market we intend abandoning some of these places for the time, and keep the ore for more favourable sales. We have employed in and throughout the mine 108 persons. Our last sale was 233 tons, the greatest sampling we have had, but in consequence of the fall in the standard it did not bring near the amount expected, a matter, unfortunately, over which we have no control. We have on the floors about 100 tons of ore dressed for next sampling, and shall have by that time about the same quantity as we sold last, whilst the costs shall be kept as low as we can possibly keep them. In conclusion, we beg to recommend the pushing on the different ends eastward as fast as possible.—F. C. HARPUR, JAMES METHERELL.

The CHAIRMAN, having moved the adoption of the report and accounts, said it would, no doubt, be thought necessary by the proprietors that he should make a few remarks upon what had been done by the committee since the last meeting, and also as to the position and prospects of the undertaking. In the first place, he might state that it having been thought desirable that the mine should be inspected by some person who would give a disinterested and *bona fide* account of the property, and also whether or not it was being prosecuted judiciously, he (the Chairman) had suggested that Captain John Nancarrow, of East Basset, whom he knew to be an independent and respectable man, should be employed for that purpose. Capt. Nancarrrow was accordingly engaged, and the result of his investigation was that he recommended driving eastward with all practicable speed. Capt. Nancarrow believed that the western mine would not pay, but that there was every probability that the eastern portion of the property would prove valuable. Shortly after that, Capt. Grose having heard that he (the Chairman) was interested in Lady Bertha, and being about to visit the neighbourhood, kindly offered gratuitously to inspect the property. The report of Capt. Grose was scarcely so flattering as that of Capt. Nancarrow, although entirely confirmatory of it. He (the Chairman) attached the greatest importance to the confirmatory character of Grose's report, from the fact that no previous communication had been had with Capt. Nancarrow. The report of Capt. Grose was to the effect that if they worked eastward they would, no doubt, do some good, but that he did not think much of the prospects westward. At their last meeting, at the desire of the committee, Capt. Harpur was present, in order to obtain his views upon the matter. It was found that Capt. Harpur entirely concurred in the views of the other agents who had inspected the property—that the development of the eastern ground should be pushed on as fast as possible. Some discussion had taken place with regard to the stores, and by recent arrangements there was no doubt the company would derive material benefit. The next point to which he would refer was the encouraging fact that the 10 fm. level, driving east, was turning out very valuable. It was at present worth 10*l.* per fm., and there was every prospect that as they progressed some valuable ground would be opened, because it was exactly over the point where the ground was worth 100*l.* per fm. With respect to the accounts, that admitted of some explanation. At the last meeting their deficiency amounted to 1039*l.*, and the present deficiency was 1145*l.* But upon that deficiency there must be added the call made at the last meeting, so that the actual deficiency was, as compared with the last account, about 350*l.* It was, however, necessary for him to state that their financial position had materially suffered by the depressed price of copper, for although their last sampling had been the largest they had ever made, the sum realised was considerably less; so that, in fact, it might be truly said their loss, or rather, their deficiency, had arisen entirely from the depreciated standard. It would be necessary upon the present occasion to make a call, in order to liquidate accruing liabilities, and at the same time provide the means for the development of the mine during the current three months. Estimating their expenses at the highest point, and their assets at the lowest, they calculated that, with a call of 2s. per share, they would at the next general meeting be in a far better financial position than at the present time.

The SECRETARY, in answer to a question, stated that after the next meeting they estimated they would have about 1200*l.* to receive, against which their costs were calculated at 1200*l.*

A SHAREHOLDER enquired why the shares were at such a depressed price in the market?

The CHAIRMAN could not account for that fact, for he could not see they were in any worse position than when the shares were selling at 30s. and 40s. In fact, the improvement in the east was of itself sufficient to make their property of a greater market value.

A SHAREHOLDER had received a letter from a mine captain in the immediate locality, to the effect that there was reason to believe Lady Bertha would become a good mine, if it were economically and justly developed.

The CHAIRMAN was glad that subject had been introduced, for he had himself been told that confidence could not be placed in the reports from the mine. The committee had

failed to find anything against their local management, but if any real grounds of complaint were shown against any individual in the company's employ, he would, of course, be removed.

A SHAREHOLDER said the letter to which he had referred did not allude to any particular person, but rather to the principles upon which the mine was conducted, stating that it was being worked to suit market purposes.

The report was received and adopted, and the accounts passed and allowed.

Mr. STEELE, a member of the committee, stated that a suggestion had been made that another shaft should be sunk in the eastern part of the mine. But the opinion of Capt. Nancarrow was that the consideration of that subject should be deferred until that part of the mine was further developed, because he said it would be impossible at present to determine its best position. Although it was true their actual position was not particularly good, yet he certainly could not see there was anything to discourage the shareholders. On the contrary, there was hope that the bunch of ore which had already proved so valuable would again prove, when reached, equally rich. The mine, he might also state, was being worked in a miner-like manner, and the management, he considered, was by no means expensive. It was necessary to make that statement, because it had been stated in the *Mining Journal* that the mine was being worked in a very expensive manner. So far as the committee were able to ascertain, there did not appear any real ground of complaint with regard to the working. The truth was, Lady Bertha at the present time was suffering from that from which all other mines were suffering —a depressed copper standard, which was, no doubt, consequent upon what was taking place in the United States.

Mr. FERRAR felt greatly obliged to the Chairman for the explanations he had given, but when he stated that a call of 2s. per share was necessary it excited his apprehensions that they were not doing as well as they ought to be, considering their returns were now larger than they had ever before been.

The SECRETARY reminded the last speaker that the falling off in the value of their returns—arising from the depressed standard—amounted to something like 3s. per ton at the very lowest computation. In answer to a question, he stated that the arrears of call amounted to only 45*l.*

A call of 2s. per share having been made, a vote of thanks to the Chairman terminated the proceedings.

EAST WHEAL GRENVILLE MINING COMPANY.

An ordinary general meeting of shareholders was held at the company's offices, George-yard, Lombard-street, on Thursday,—Mr. F. R. WILSON in the chair.

Mr. J. WATSON (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts showed—

Balance last audit	£166	1	7		
Calls received	747	12	11		
Ore sold	167	19	9	= £1081 14	3
Mine cost, March	£167	6	0		
" April	193	6	8		
" May	212	4	9		
Merchants' bills, May, June, July	188	13	8		
" " Sept., Oct., Nov.	178	8	10		
Sundries	9	7	6	= 949 7	5
Leaving credit balance				£ 132 6	10

The balance of liabilities over assets was 540*l.* 14s. 8d.

The agents' report was then read, as follows:—

July 23.—Since the last meeting we have sunk the engine-shaft 3 fms. 4 ft., made a plat in the 35, and a barrow road around the shaft, and cut the ground for the cistern, so that we shall commence to-day to fix the bearers, &c., for the standing-lift, which will be completed by the latter end of this week. The engine-shaft is sunk about 1 fm. 2 ft. below the 35, where the lode is 3 ft. wide, composed of black and grey ore and mundic, with gossan, quartz, peach, and tin; we estimate it to be worth from 3 to 4 tons of better quality ore to the fathom, and tin about 10*l.*, or say, in money, from 20*l.* to 25*l.* per fm. for length of shaft; sinking by 12 men, at 25*l.* per fm. The 35 is extended east of the shaft 1 fm. 3 ft. The lode is in two parts, composed of gossan, quartz, prian, and tin, with good stones of ore. We think in driving this level a very short distance that the lode will be found to improve, particularly as in the level above we had some almost solid stones of tin. This end is about 10 fms. west of the cross-course, and which we propose to resume the driving of as soon as the standing-lift is fixed. The 35 is extended west of the shaft 8 fms. The first 3 fms. was worth on an average 1½ ton to the fm., with good work for tin, say about 5*l.* per fm. The next 3 fms. were better for tin, worth 8*l.* per fathom, with stones of ore. The last 2 fms. driven have yielded about 5 tons of much better quality copper ore and tin, to the value of 4*l.* to 5*l.* per fm. The lode in the present end is from 2 to 2½ ft. wide, producing full 2 tons of ore, worth 6*l.* per ton, and tin about 4*l.* per fm. We estimate the whole of the drivings west, in this level, to be worth 10*l.* per fm., and the lode in the bottom of this level is 2½ ft. wide, improving, and which we calculate to be worth full 12*l.* per fathom—a fine looking lode; and if we may judge from the 25, immediately over, we are of opinion this level will lay open some valuable ground; driving by four men, at 3*l.* 10s. per fathom. The 25 is extended east of shaft 26 fms. 4 ft. Since last meeting we have been entirely in the elvan, where the lode has been split; we are glad, however, to find the elvan has worn out, and the lode is converging, composed of quartz, &c., with occasional stones of ore, and taking a more perpendicular dip: we are expecting a change for the better shortly; driving by four men, at 3*l.* per fm. The 25 is extended west of the shaft 43 fms. 0 ft. 6 in., where the lode has varied in size from 4 to 2 ft. wide, composed of a fine gossan, prian, and quartz, with some good ore and tin; and, if appearances mean anything, there must be a deposit of ore below; driving by six men, at 3*l.* per fm. At 40 fms. west of the engine-shaft we have sunk an air-shaft 18 fms. 4 ft., for ventilation, &c., and which we expected would have been holed to the 25 by the end of this month; but, on account of this ground being a little stiffer, it will take another fortnight. As soon as this is completed we shall sink winzes from the 25 to the 35, thus laying open ground that will be taken away at low tributes. We sampled on the 16th (computed) 26 tons of better quality ore than the last, and we have now at the surface from 5 to 6 tons of ore that would make nearly 8 produce. We have sold to-day 1 ton 16 cwts. 2 qrs. 7 lbs. of tin for 116*l.* 18s. 9d. The number of hands employed are—underground, 33 men; at surface, including engine-men, &c., 10 men, 7 boys, and 12 girls; and, in conclusion, we beg to endorse our former opinions, that seeing the very promising lode we have in the engine-shaft, with the 35, both east and west, the 25 west, and the chances of improvement in the 25 east, and of making discoveries on two lodes north of the main one, in a distance of 27 fms., which can be intersected in the 35 in seven or eight months, that a more promising young mine than this is not in the whole district; and, again, we think if the prospects continue that during the next quarter we shall do very much better than the last.—P.S. Our engine and machinery are in good working order, and we calculate that a new engine will not be required before next summer, when we hope the mine will be in a position to pay for it, without calling upon the adventurers.—G. R. ODGERS, W. BENNETTS.

Mr. J. Y. WATSON, F.G.S., remarked that there was nothing in the accounts just submitted to show that they had sampled 26 tons of copper.

The CHAIRMAN said that fact appeared in the agent's report. The sampling amounted to 26 tons. He was glad to hear from the agent that another engine would not be required for at least twelve months, for a rumour had been circulated that they must have another engine forthwith.

Capt. ODGERS said that at the present time the pressure upon the piston was about 16 lbs. per square inch, but it was perfectly capable of bearing a pressure of 22 lbs., which would not take place until they were below the 55, to reach which would occupy them quite twelve months. They calculated the air-shaft would make the water easier.

Mr. WATSON enquired the estimated value of the ore raised during the past three months?—Capt. ODGERS said that the tin had been sold for 116*l.* 8s. 9d., and there were 26 tons of copper, which, according to the present standard, would make 3*l.* 5s. to 3*l.* 10s. per ton, and they had 6 tons of copper at surface, which he could safely estimate at 6*l.* per ton.

The CHAIRMAN said there had been so many contradictory statements with regard to the value of the present workings, that it had been deemed desirable that the opinion of their agent should be backed as much as possible by other independent agents; and with that view Captain W. Roberts, of West Basset, who was a very good miner, and well-acquainted with the district, had been requested by the committee to inspect the property, and whose report he would read for the information of the shareholders. It was as follows:—

July 22.—In accordance with your request, I inspected this mine of Friday last, and now beg to hand you report thereon. The operations are as follows:—Sinking the engine-shaft under the 35 by 12 men, at 25*l.* per fathom. Driving the 35 west by four men, at 3*l.* 10s. per fm. Driving the 25 east by four men, at 3*l.* per fm. Driving the 25 west by six men, at 3*l.* per fm. Sinking air-shaft from surface by six men, at 4*l.* 10s. per fm. The engine-shaft is about 9 ft. below the 35; in it the lode is 2½ ft. wide, of a very promising appearance, and producing for the length of shaft (14 ft.) 3 tons of ore per fm. Could it be broken dry, which is almost impossible at an engine-shaft, it would produce more ore, and be of better quality—worth for copper ore 12*l.* per fm., and, according to the agents' account, it is also worth about 10*l.* per fm. for tin; this I believe they are prepared to prove by the ground spent, and the tin produced and now ready for sale. In the 35, 9 ft. east of engine-shaft, the lode is divided into two parts with a horse of granite between them; the north part is nearly 1 ft. wide, composed of flookan and spar; and the south part is 1 ft. wide, producing a little ore, but not sufficient to value; this end, though poor, and at present suspended, should, when convenient, be driven towards the cross-course, 10 fms. distant, around which an improvement may reasonably be expected. The same level (the 35) is driven 8 fms. west of shaft. In the present end the lode is about 2 ft. wide, 1 ft. producing 2 tons of ore per fathom, worth probably 6*l.* per ton, or 12*l.* per fm.; the other part of the lode produces saving work for tin. This is a very promising end, and from the appearance of the lode driven through in the level above, good bunches of ore may be expected. The 25 is driven about 30 fathoms east of shaft; in the present end the lode is divided into branches, neither of them producing any ore to value. In the same level, 36 fms. west of shaft, the lode for the last 5 fms. or 6 fms. has been disordered by meeting ground a little harder than usual. This end is within about 4 fms. of being under the air-shaft, which is sunk 20 fms. from surface, leaving something like 3 fms. to sink to get it down to the back of the level. To make a communication here is very desirable to complete the required ventilation. The mine is being worked in a miner-like manner. The principal points to which your attention should be directed are the sinking of the engine-shaft, and at every 10 fms. in depth extending levels therefrom. The large gossan lode discovered in the 25 for nearly 40 fms. in length; the ore ground in the 35 west, with promising and productive lode in the bottom of the shaft are strong indications of a lasting and profitable mine. There are also two lodes not more than 30 fms. north of East Grenville shaft, which are backed just under the surface in the adjoining mine to the west, and towards which it would be desirable to cross-cut in the 35 or 45 fm. levels.—P.S. July 23: I called at the mine this morning, and Capt. Bennetts told me the lode in the 35 west was much the same as when I saw it on Friday. There is now in the slide on the floors about 2 tons of ore, the best ever seen in East Grenville; part of it was drawn up from the 35 fathom level last evening.—WILLIAM ROBERTS.

The CHAIRMAN thought that they would agree with him that the report just read was very satisfactory, and entirely confirmatory of all the reports received from time to time from their own agent. A great deal had been said about the improper value which had been put upon the lode, but the best test that could possibly be adduced—absolute money sales—simply proved that their agents had in no single case over-estimated the value of the lode in the shaft. That, they must all agree, was a complete answer to the stuff and nonsense that had been abroad about "exaggerated and coloured reports." The accounts showed them there had been realised during the quarter 116*l.* for tin, and the report informed them there had been sampled between 80*l.* and 90*l.* worth of copper ore. So that the value of the lode was, in fact, greater than even the agents had stated it to be, and, moreover, Capt. Odgers gave it as his opinion that he would be able to return considerably more tin had he greater stamping-power; to secure which he was now in treaty with the Condurrow Mine, by which he would be able to amplify their tin returns. It was very desirable that the air-shaft should be completed, which would be done, according to Capt. Odgers, in about three weeks, as it would prove of great advantage in the development of the mine. A great deal had been said about their being close upon the boundary of Grenville, but it appeared to have been forgotten, that in addition to a considerable piece of ground yet to be developed in that direction, there were something like 200 or 300 fathoms to the eastward. There was no doubt the lode would improve in the eastern ground—in fact, they were at the present moment looking for an improvement in the 25 east. Taking all things into consideration, he thought there was good ground for congratulating the shareholders upon possessing a very promising and prospectively valuable property. They lived, it was true, in most extraordinary times, but it was his most confident belief that, so far as East Grenville was concerned, those who held their shares the longest would reap the greatest benefit.

The report having been received and adopted, the accounts were passed and allowed.

The CHAIRMAN said the next question was that of call. The committee thought that a call of 2s. per share should be made, in order to carry on their operations during the next three months.

Capt. ODGERS, in answer to a question, said he could double the quantity of tin if he had the necessary stamping power. Their tinstuff was not very rich, and if it were sold in the stone the company would sustain a loss by not realising anything by the copper which it contained. When cleaned their tin was very good.

The SECRETARY said, before the question of call was gone into, he had to state that an application had been made for the restoration of certain shares which had been forfeited, the applicant stating that no notice had been received that the forfeiture was about to take place.

The application was not entertained, upon the ground that the meeting had no power to restore the shares. A call of 2s. per share was then made.

Captain ODGERS stated that they had already large pitwork—large enough, indeed, for a 60-inch engine.

The CHAIRMAN stated that upon the mining market—and upon the mining market only—there was in vogue a system, which could not be too much discountenanced, of spreading false and scandalous reports, by telegram and otherwise. Those lying telegrams, paraded about by interested persons, were sent by special agents, actually employed to misstate facts, as best suited their employers. He hoped, however, such disgraceful conduct had now received a check, for by such proceedings a great many good people were positively frightened out of their shares, and incalculable injury was done to the mining market generally.

After some discussion, upon the proposition of Mr. WATSON, seconded by Mr. CLIFT, it was agreed that the resolution passed at the last meeting, limiting the inspection of the mine to one day in the week, should be rescinded, and that the mine should be thrown open for inspection each day between the hours of eight and twelve o'clock.

Messrs. Williams, Watson, and Wilson were appointed the committee of management, the latter gentleman in the place of Mr. F. Pryor, who was disqualified by the sale of his shares.

A vote of thanks to the Chairman was passed, when the proceedings terminated.

MARIQUITA AND NEW GRANADA MINING COMPANY.

The ninth annual general meeting of shareholders will be held at the London Tavern, on Monday next. The report of the directors, which will be then presented, states that the quantity of ore raised at the Santa Ana Mine in the year ending March 31 has been 2490 tons, and the quantity of fine silver produced has been 84,771 ozs., being 55,838 ozs. less than in the previous year. The former yield could have been kept up, but Captain Ridington found it necessary to open certain communications with the shaft, as the ore was being drawn through a distant winze to an upper level, at an unnecessary expense. Mr. Birchall, the agent of the company at Bogota, has been to England, and after affording the directors much valuable information, has accepted the post of resident superintendent at Santa Ana, and the directors trust that the mine will not only be put in good working order, but kept so. The prospects of the mine as regards the supply of mineral are encouraging in the highest degree. Capt. Ridington appears to have his work well in hand, his health has become better established, and it is believed that every confidence may be placed in the plans he has laid down for the development of the resources of the mine. The surface works are at present sufficient for the treatment of the mineral which the mine can be made to yield, but it is thought that attention should be directed to the question in what mode an extension of these works can be most conveniently made. Exploratory works have of late been rather neglected during the period of prosperity, and subsequently because all the exertions of the establishment were needed to maintain the concern in profit. The Marmato establishmant has given a moderate profit during the last 12 months. The balance-sheet showed—

Capital	£103,815	0	0		
Debentures	12,600	0	0		
Loans (bankers)	2,364	6	8		
Bills payable	287	17	0		
Dividends unpaid	736	1	9		
Sundry creditors	5,019	3	6	= £124,822	8 11
Value of Santa Ana and Marmato	£ 77,088	0	0		
Value of Purima	100	0	0		
El Pielto Mine cost	1,660	12	6		
Office furniture	200	16	3		
Stock and cash available	15,647	5	9	= 94,706 14	6
Leaving debit balance				£ 30,115 14	5

The deficiency is in consequence of the suspended Purima being written off.

TRUTH'S ECHOES; OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market continues depressed, although there has been more business transacted during the past week than for some time prior; and from the enquiries that are being made there is evidently a desire on the part of the mining community to purchase at present reduced prices. Leading dividend mines are among those enquired for, but the speculative progressing ones appear to be the favourites; and we trust some favourable and progressive movement will take place in the share market during the coming week.

There has been an enquiry for EAST BASSET shares, and they have changed hands at present quotations.——WEST SETON shares have been transacted.——NORTH DOWNS shares have improved, and enquirers for them still to be found.——COOK'S KITCHEN and NORTH TRESKERBY shares have been dealt in, but at lower rates.——EAST GRENVILLE and GREAT RETELLACK shares have been freely negociated, the latter at improved rates, arising from some slight improvement in the mine.——PROVIDENCE shares have changed hands.——CONDURROW shares have been in good request.——WEST POLMEAR, WHEAL ANNE, NORTH HALLENBEAGLE, and UNITT shares are among the transactions of the week.——EAST CARADON shares remain firm at present quotations. Although dealt in during the week, there has not been any large number of transactions.——MARKE VALLEY shares are quoted lower, and some business done.——WEST ROSE DOWN shares are in good demand, at higher rates.——WEST CARADON shares have found buyers, at present prices.——HERODSFOOT, TRELAWNY, and MARY ANN shares continue heavy, the former offered at much lower prices.——EAST RUSSELL shares have had some changes during the last few days, but there are firm buyers at present, with an upward tendency.——LADY BERTHA shares have changed hands at a very low price.——NORTH ROBERT shares have been in request, arising from a reported improvement.——SORTHIDGE shares are quiet, although some transactions have taken place.——GREAT WHEAL MARTHA shares are freely enquired for, at minimum prices.——DING DONG shares have been in request, and some of them have changed hands, but they do not maintain last week's quotations. OLD TOLGUS UNITED shares are in good request, at advanced rates, the improvement in the 52 being deemed important.——EAST CARADON continues to maintain its improved position, showing no material change since last week. The 60 east, on the caunter lode, is still worth 60*l.* per fm., and west 70*l.* per fm. All the other places producing ore are much the same. The extraordinary discoveries which have taken place within the last 18 months have created great excitement in the share market, and numerous comparisons with this and other mines, with a view to arrive at a fair market value of the shares; but whether the price be high or low, the chief cause arises, no doubt, from the large number which has and is being "beared" in anticipation of a reaction, and whilst the system of "bearing" continues there is no probability of a decline. This can be said, that no mine now being worked has such an amount of reserves of ore from the comparatively short length of ground driven.

At WEST ROSE DOWN, in driving the adit south, they have intersected a lode about 18 in. wide, of a very promising character, producing some tolerably good stones of grey copper ore. They are making good progress in sinking the new engine-shaft, and the masons have commenced building the engine-house.

EAST DEVON CONSOLS continues to hold out the same promise as for some time past, without any positive improvement.——LADY BERTHA: The operations are now mainly directed to developing the eastern ground, from whence the greatest portion of ore has been returned. The ends now being driven in that direction are the 53, which is now in the cross-course, and letting down a great quantity of water, which will drain the upper levels; the 41 east, where they are driving by the side of the lode; the 30, which is presenting some very encouraging prospects; the 20 and the 10, the lode in the latter is from 3 to 4 ft. wide, looking more promising than ever seen before. The 53 west is being driven with the intention of getting under the ore gone down from the 41. At the meeting, held on Thursday, a call of 2s. per share was made.

WHEAL ARTHUR is reported to have improved in the 50. The rise in the back of the adit is expected to communicate with the 50 in course of a fortnight, when that portion of the sett will be well ventilated. There are other points looking more encouraging.——At HAWKMOOR the operations are limited at present. There is a fine lode in the backs of the 25. There is no alteration in any other place.——CALSTOCK CONSOLS: In the 48 west they are driving towards a large cross-course, where it is expected the lode will become productive. In the same level east the lode is 2 ft. wide, composed of mundic, peach, and soft spar, and is very promising for improvement. The 24 cross-cut, towards the north caunter lode, from the distance driven must be very near the point of intersection. The same lode at the 12 is 2 ft. wide, carrying ore, spar, and mundic, and is very promising. In a pitch in the back of the adit level, 60 fms. east of shaft, the lode bids fair to improve, and, there being 50 fms. of backs, allows of ample ground for a large deposit of ore, which is fully expected. They have an improvement in the back of the 36, on the south caunter; to prove which they are about commencing a cross-cut, and will accomplish it in 3 or 4 fms. driving: so that they have several points of great interest at present coming off.

At NORTH WHEAL ROBERT they have intersected a tin lode in the 30, west of the trial shaft, and found it to contain excellent stones of tin.——At EAST RUSSELL there is an improvement reported in the 88. The 100 west is looking more satisfactory, and an early discovery is anticipated. Other places without any change.——At SORTHIDGE CONSOLS no material change has taken place during the past week, although there are some places exhibiting a prospect of improvment. Two or three stopes are looking more encouraging, and returning fair quantities of ore.

GREAT WHEAL MARTHA continues to look very encouraging, and the returns fully as much as anticipated. It has been intimated that further capital may be required; but emanating from a source so questionable, there is reason to believe that it arose from interested motives, especially as it is officially stated that the financial position of the company is good, and not likely to require another issue of shares. In fact, all the amount from the issue of 2000 shares at par has not yet been called up, and they have 1600*l.* coming in for ores sold. They purpose selling on Monday next 170 tons of coppery mundic, and on Friday upwards of 200 tons of copper ore will be sampled.

GREAT TREGUNE CONSOLS: Capt. William Richards, of West Sharp Tor, inspected this mine on Wednesday last, and states, in a brief letter, that "the 80, west of the engine-shaft, is full 3 ft. wide, composed of friable and compact quartz, prian, mundic, capel, flookan, and good stones of rich yellow copper ore; the leader or orey part being 18 in. wide, and very promising. Water percolates freely from the bottom part of the end, which, probably, indicates a favourable change."

At EAST WHEAL GRENVILLE the lode in the engine-shaft still maintains its character and general appearance—a very promising lode. The 35 west is reported to be looking better both for copper and tin. The other points of operation are without any material change. At a meeting held on Thursday a call of 2s. per share was made.

WHEAL ANNE (St. Austell): Among the Mining Correspondence of this week's Journal can be seen Capt. James Stevens's report. Operations are being carried on in four places, all producing good tinny stuff, which can be taken away at a fair profit, from the easy character of the ground. Allen's lode, cut in the deep adit, is very large and promising, and from whence great results may be fairly anticipated. The stamps are expected to be at work within a month from the present time, when a good batch of tin is expected to be in the market. On Thursday last they took down a portion of Allen's lode in the shallow adit, 12 fms. below the surface; it is 9 ft. wide, good work for tin, and ground easy. Six men stoping and two men driving on this lode will keep twelve heads of stamps constantly going, and should the lode maintain its present appearance and value, it will pay the cost of the mine and leave good profits.——GREAT RETALLACK is reported to hold out some hopes of a favourable change. In sinking the engine-shaft they have a considerable influx of water, but not before some good stones of lead were found, which has created more encouragement to see the result of further progress.

At OLD TOLGUS UNITED the lode in the 52 west continues to look well; the lode is full 4 ft. wide, and worth 12*l.* per fm. for copper, and the remaining portion is composed of tin, blende, and mundic, and improving in size and quality.——BREA CONSOLS continues to look very promising, and the returns of tin gradually improving. The produce for June, sold last week, realised 292*l.* 14s. For the quarter ending June 30, 12 tons 0 cwts. 3 qrs. 5 lbs., realising 841*l.* 2s. 6d., were sold, whilst that ending March 30, 8 tons 8 cwts. 2 qrs. 27 lbs., realising 592*l.* 15s. 10d., shows the progressive prospects of the mine.

At GURLYN they are raising large quantities of good quality tinstuff; and when the 24-head stamps, recently purchased, are erected it is evident that the mine will make large returns. A melancholy accident occurred here on Friday last; a poor fellow was killed by the explosion of a back-hole whilst in the act of tamping it.——At ROSEWARNE UNITED they have an improvement in the back of the 80, east of footway-shaft; it is a fine course of ore, the lode being 2½ ft. wide, and is set to four men, at 3*s.* in 1*l.*

TOLCARNE continues to hold out much promise, which, in all probability, will be realised at deeper levels. There is a very encouraging lode in the shaft, as well as in the intermediate levels, but the general impression is that the lodes will become more productive in depth.——At TRYPHENA (Camborne) the preparatory work for the machinery is going on very expeditiously, and it is believed that the works will be completed much earlier than stipulated for.——At SOUTH WHEAL KITTY the prospects continue to improve as they progress. A further improvement has taken place in the shaft by the intersection of a branch good for tin, which will fall into the main lode in about 2 fms. deeper. The lode in the adit is 1 ft. wide, tinny throughout. An important change is expected to take place within the next fortnight.

JAMES LANE.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

DRAKE WALLS MINE will sell this day (Saturday) 20 tons of black tin, for June month:—No. 1, computed, 9¼ tons; No. 2, ditto, 10¼ tons.

CATHEDRAL MINE.—We are informed that the committee of management of this mine had secured the services of Capt. W. H Reynolds as manager, and that they will commence driving on two of the lodes in the course of a week or ten days, by which time the adit level is expected to be completed.

OLD TOLGUS UNITED MINES.—The improvement in the 52 continues; the lode is now 4 ft. wide. Six tons of good copper ore have been drawn from that end in the last week; the ore is worth 6*l.* per ton. The other part of the lode is worth 5 cwts. of tin per 100 sacks. The lode in the 42 is 2½ ft. wide, and is producing some fine ore, and letting out much water. The mine never looked so well as at present; and as the great cross-course is neared it is expected this mine will prove as productive as other mines near, which are traversed by the same cross-course.

TRYPHENA PENDARVES (Camborne).—Since the meeting on May 14, the operations have been prosecuted with vigour under the directions of Capt. R. Pryor, the intelligent manager. The engine-house, to receive a 60-inch pumping-engine, purchased at the Lewis Mine, will be completed in a week, and the engine will be ready to work within six weeks from this time. The engine-shaft, formerly a whim-shaft, being too small to receive the pitwork, is being cut down, and will be completed to the adit within the six weeks. Mrs. Pendarves, the owner of the land—and whose name has been applied to the mine—with her wonted and well-known liberality, has ordered that all the miners and labourers belonging to the mine shall be treated with a dinner, &c.; which, we understand, will be given on the day the engine is set to work. The expedition with which the works have been conducted is very creditable to the manager. We have no doubt that the results of the working will realise the anticipations entertained by practical miners, who are unanimous in their opinion that the mine will become profitable at an early date. The company consists principally of gentlemen resident in the neighbourhood, many of them of great wealth—all of them conversant with mines, and most of them of sound judgment in mining affairs. The purser is Mr. Elias Dunsterville, of Redruth, a first-rate accountant, and of long-tried integrity.

GREAT CRINNIS.—An improvement has taken place in the 100 west, where a small cross-course has been met with, which has entirely altered the lode. The lode is very large, 6 feet of which is being carried, which is holding some fine yellow copper ore, quartz, peach, &c., and giving every indication of becoming a valuable lode.

WEST DOLCOATH.—The engine, in course of manufacture at Wadebridge, it is said, will be ready in about a month—size, 40-inch cylinder; engineer, Mr. W. H. Gray, of Roche, near St. Austell, who is the contractor for the supply and erection of all the machinery at present required. It is a pity that such delay has occurred in the development of this property, which abounds in lodes of the most promising character. Between 40 and 50 years ago a small engine of inadequate power was erected on the mine, and several rich parcels of copper ore were raised, but the company, consisting of poor men, was obliged to abandon the work from inability to procure a larger engine. From that time to the present the bottoms have been under water. It is believed that with a small outlay this mine may be brought into a paying state, and it is hoped that in a short time the engine will be at work, and the operations carried on with spirit. The sett is bounded on the east by North Dolcoath, from which a great deal of argentiferous gossan was sold a little while ago; similar gossan has been found in West Dolcoath, but little confidence is now placed in the silver products of Cornwall. Both these mines must be worked for copper and tin mainly. Capt. John Dale is to be the manager, a gentleman of great experience in mines generally.

WHEAL ALBERT, to the west of Old Wheal Shepherds, has just been started, in 512 shares, at 2*l.* each, and the whole of the money goes to work the mine. All the shares, we understand, have been taken up, the majority of them in Cornwall. A 36-in. cylinder engine has been purchased, and it is considered 700*l.* will fork the mine, when good quantities both of blende and lead can be returned. When worked twenty years ago, with blende at 20*s.* per ton and lead very low, the mine is said to have produced a profit, and a lode in the 35 worth 60*l.* per fathom for lead. There are six east and west lodes, all having a highly promising appearance. The sett is held under grant from His Royal Highness the Duke of Cornwall, and Messrs. Watson and Cuell are to be the treasurers.

GREAT NORTH TOLGUS.—The temporary suspension of work here is owing to the heavy arrears due from some of the shareholders. Measures are being taken to recover the amounts due from them, and, in the event of their non-payment, or their surrender of their interests, the shares will be sold under an order in the Vice-Warden's Court, to be obtained at the next sittings. The purser, who held the largest interest, paid all the calls on his shares (2500*l.* and upwards). The amount expended, including the liabilities (about 2000*l.* or 3000*l.*), is 9000*l.*, which has been expended in sinking shafts, driving levels, erecting a 40-in. engine, erecting all needful buildings, &c. The discovery of copper ore in Wheal Mary lode has excited the cupidity of some people in the neighbourhood, who have actually applied to the lord's agent for a grant. They will have to wait a little longer for the privilege of entering into other men's labours, and reaping the fruits thereof.

NORTH PROVIDENCE (St. Ives), AND WHEAL CONQUER (Towednack).—The works in these mines will be resumed shortly, as soon as additional capital has been raised, which, I understand, is forthcoming. Captain J. Dale is the manager of these mines, and Mr. Spargo the purser. The mines are of good promise, and with a little outlay could be proved. Engines are about to be erected on them with that view, and I hope in a few months to be able to report the sale of copper from the former mine and of tin from the latter.

MINING IN SHROPSHIRE—THE CENTRAL SNAILBEACH MINES.—It is proposed to form a company, upon the Limited Liability Principle, for working a very valuable piece of mineral ground which forms the westerly continuation of the well-known and highly-profitable Snailbeach Mines, immediately to the north of the New Venture sett, and about two miles from the Minsterley Railway Station. The capital which it is estimated will be required for the prosecution of the works already in operation is 4000*l.*, but to provide for all possible contingencies it is intended to fix the capital at 10,000*l.*, in shares of 1*l.* each; of these 1330 shares are to be considered as paid up, and handed over to the promoters for the transfer of their interest, and in addition to this they are to be reimbursed for all judicious outlay in connection with the company. Messrs. Phillips and Darlington have carefully inspected the property, and their report is of a very satisfactory character; they consider the piece of ground to be worthy of more extensive and systematic development, and they are further strongly of opinion that should it be proved, as there is every reason to believe, that the Snailbeach lodes run through this property, they will, if judiciously developed, afford remunerative and lasting results.

DRAKE WALLS.—This mine is looking much better in all the western ends, and the returns of tin have much increased; on Saturday last 20 tons were sampled, for four weeks, and the next sampling is expected to be 25 tons.

PERRANZABULOE MINING DISTRICT.—The leading mine in this district is unquestionably the GREAT RETALLACK. The main lode is one of unusual size and productiveness, and may fairly be considered the champion lode of the said district. The width of this great lode is in some places as much as 240 feet, and is highly mineralised throughout, showing on the back, and from thence to the 18 fathom level, a mass of low quality iron ores. At the 18 the iron suddenly disappears, and blende in very large quantities becomes substituted. The yield of blende has for several months past been from 400 to 500 tons per month, leaving very large reserves for future operations. The engine-shaft is now being sunk on one side of the lode below the 35. Owing to the favourable nature of the ground the shaft has been speedily sunk; and during the last few days an entirely new feature has come to light. The blende appears to have suddenly gone out, as the iron did at the shallower levels, and some very rich stones of silver-lead have been broken from the bottom of the shaft. This change the manager (Capt. W. H. Reynolds) has for some time been expecting, and at present there is every appearance of his most sanguine hopes being even mere than realised. The best miners of the district, men who for many years worked on lead, declare they never before saw such indications. Should this lode turn into lead, the deposit would be of the highest magnitude. Small lodes, when productive, make small deposits of ore, but great lodes great deposits.——EAST BUDNICK AND MOUNT MINE is situated immediately to the West of Great Retallack, and it is proposed to operate on the same lode, where there are much greater chances of success than on any of the other lodes in the sett.——WHEAL HOPE adjoins East Budnick, and is, in fact, the sister mine of the Great Retallack. It has been extensively worked by a former company, and made large profits. The present operations are intended to develope a side lode, discovered by Capt. Reynolds some little time since, and who is ably supported in the development of mines in this district by Messrs. Watson and Cuell, of London, to whom the district is much indebted for its present activity, and every miner in the district feels personally gratified at the interest they take in it. This mine can be speedily and cheaply tried. To carry out this object a steam-engine of ample power has lately been erected by Messrs. Michell and Jenkin, engineers, of Redruth, and was put to work on Saturday last, in first-rate style. The manner in which the plant is laid out reflects much credit on the manager and engineers, being at once powerful and cheap.——WHEAL ALBERT is about to be reworked under the same management. Capt. Reynolds has purchased, at a very low rate, a second-hand 36-inch cylinder pumping-engine, together with other useful machinery, which will be at once erected. The sett has been for a long time the "bone of contention" between several parties in the neighbourhood. But the Duchy Office at last decided on granting it to Capt. Reynolds, of the Great Retallack, who seemed best able to form a respectable company for effectually working it. This mine produces blende of the best quality, and silver-lead. There is no doubt of this being the best unworked mine in the district, and silver-lead. There is no doubt of this being the best unworked mine in the district, and it has been confidently reported by parties of the highest respectability that, as soon as the mine is in fork, returns of mineral can be easily made, sufficient to meet the monthly cost. The last company were obliged to abandon the undertaking in consequence of the pumping-engine being placed on the wrong part of the mine, and their funds being exhausted. On the north-west of Great Retallack is the Mount Mine, and on the north Trebiskin and Trebellan, all of which have been abundantly productive. Immense quantities of silver-lead have been sold from the former mine, for upwards of 500*l.* per ton. Also, on the east of the said Retallack, is Duchy Peru: this mine has and is at present producing large quantities of blende and copper. The operations are on the same lode, and present excellent chances of success. In conclusion, I can say that I wish every success may attend the prosecution of these mines. The district is one which has yielded rich deposits of lead. Wheal Hope, Wheal Golden, Old Shepherds, and East Wheal Rose,

are a sufficient guarantee, and I know no district containing equal chances of success. The scientific observer constantly meets with objects of interest, and with many new features to elucidate subjects which in other districts have baffled the most acute.—A RESIDENT: *July* 23.

EAST TRESKERBY.—At the meeting there was a call of 10s. per share made. The mine looks well; the north lode cut in the cross-cut is from 3 to 4 ft. wide, and at that point worth from 6*l.* to 8*l.* per fathom. In about 5 fms. driving south they expect to have the middle lode, where large returns of ore have been made by the ancient workers. The engine works well, and the flat-rod shaft is sinking by six men, at 8*l.* per fathom, in beautiful ground, composed of spar and fine killas. In 15 fms. more sinking they expect to cut the North Buay great tin lode, where they are returning large quantities of tin. The mine is opening very favourably, and looking well. The shares that were thrown up by a defaulter are all taken by Messrs. Sims and Co. Mr. Sparks is the purser, in place of Mr. Sims.

DOLGELLY.—The gold and copper mines in this neighbourhood are opening out well, and, according to present appearances, will more than realise the expectations of the proprietors. Several good mines are now being worked with vigour, most of them by private companies; and all seem likely, with a little development, to be enabled to pay handsome profits. A mine is being worked by some poor men, who are realising great profits, the copper ore being of a very good quality and making up to the surface, enabling it to be wrought open-cast. The CLOGAU GOLD MINES are looking well, and it is expected that before long the returns of gold will be something enormous; the mines to the west of the Clogau are also looking well. Mining in this district is in the ascendant, and deservedly so, as the veins have been proved to contain gold as well as copper, and both in large and profitable quantities.

NORTH HAFOD, OR DEVIL'S BRIDGE MINES.—The agent's report this week speaks of a good discovery of ore on the south lode of the North Hafod Mines, and from the specimens forwarded to London, considering they are from so near the surface, it is not unreasonable to predict that at a period which will not take long to elapse these mines will become a very favourite holding. The ore is strong and massive, requiring, it is true, considerable crushing and dressing power; but the quality of the stuff is identical with the ore raised at Frongoch from a similar depth. If these indications continue, and the deeper sections of the lodes maintain their analogy with those of the great and valuable mine of Frongoch, nothing better could be desired, and a few fathoms of sinking will bring the shafts into profitable ore ground. It would be a great thing for the neighbourhood of the Devil's Bridge, the site of the ancient lead smelting-houses, if another Frongoch should be developed from these favourable beginnings, as it would enrich the whole country from there to Cwmystwith. The Cwmystwith Mine employs a whole colony of people at the head of the valley of the Ystwith. Frongoch engages the labour of all the population from the Devil's Bridge westward for some miles, but the Devil's Bridge itself, under the auspices of Mr. Chambers, the land proprietor, is becoming an extensive village. It is true the houses are somewhat scattered, but that is all the better for the inhabitants, it being a part of Mr. Chambers's plan to give every man who builds a cottage on his estate sufficient land to keep a cow, which is a great boon, and adds greatly to the comfort of the labouring classes, chiefly here consisting of lead miners. I understand it is part of Mr. Chambers's programme in improving this part of Cardiganshire, in which the beautiful grounds of Hafod are situate, to form from the Devil's Bridge eastward, along the line of the intended railway, a range of villa residences, about 200 yards apart; and from the beauty of the scenery of this neighbourhood, which on the name of Hafod being translated implies a summer residence, the healthful quality of the air (the ground standing upwards of 1000 feet above the level of the sea), and the purity of the water, there can be but little doubt that under the facilities of a railroad, besides being only 12 miles from the clean, interesting, and picturesque watering place of Aberystwith, the locality will be much sought after. In addition to its great salubrity, its seclusion and quietness afford a position of repose for invalids, and an excellent place for relaxation for those who, worried with the din and business of cities, seek the din of waterfalls. From all these favourable features we may reasonably hope to see the Devil's Bridge, at no distant period, become one of the most important as it is now the most romantic place in Cardiganshire.

GREAT NORTH TOLGUS, NORTH PROVIDENCE, WHEAL CONQUER, AND WEST DOLCOATH.—The works in these mines (in some of which, owing to pecuniary difficulties, little has been done of late) will, it is said, very shortly be resumed in a spirited manner under the direction of the manager, Capt. John Dale, who is a first-rate miner. He holds a large interest in each of these mines, which demonstrates the good opinion he holds respecting their character and prospects. I believe that the properties fully warrant the sanguine hopes entertained, and am pleased to hear of the intended spirited working. If the present companies do not work, other parties will soon supplant them, and carry off the prizes.

FOREIGN MINES.

EAST KONGSBERG.—D. T. Macdonald, July 16: We are making good progress at Neues Glück; pumps are set down in the mine, and the adit is being driven from both ends, we expect to finish this in four months. The small drum at Sundse continues productive for native silver; we expect this vein will enlarge in depth. The vein at Ramsrud is giving malm, or argentiferous sulphurets. The cross-cut at Anna Sophia adit is being driven by fire, and kept continually at work.

VICTOR EMANUEL.—Miggiandone, July 19: We are happy to tell you that this mine never looked better. The ore in Thompson's level continues good, and a decided improvement has also taken place in Fisher's winze and Falconer's level. In the former the lode is now worth 2 tons of very rich yellow ore per fm. In Falconer's level we are driving on a lode worth 2½ tons of first-class ores per fm. Other points without change. We shall send by a vessel, which leaves Genoa next month for Swansea, about 100 tons of copper ore.

Baveno, July 20.—Yesterday a party of Italian miners commenced operations here. We have ordered them to begin clearing out the great adit level and the principal level at Prealvago. Near the latter a large quantity of orey stuff left by the old miners can be made to produce a considerable quantity of rich copper ore as soon as dressing machinery can be erected. We shall at once commence to make preparations for getting the water out of the Miniera Vecchia.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices from Brazil:

Morro Velho, May 29.—GOLD EXTRACTED TO DATE.—The produce for the second division of May, being a period of nine days, is as follows:—

	Oits.	Tons stone.	Oits. p. ton.
From General stamps	5699	from 1008·0 =	5·653
„ Herring (East Bahu)	2357	289·6 =	8·138
„ Lyon (Mid. and West Cachoeira)	1574	271·2 =	5·803
„ Cotesworth (West Quebra Panella)	430	136·8 =	3·143
Total	10,060	1705·6 =	5·898

June 17.—The produce extracted during the month of May, I have pleasure in advising, amounts to the gratifying result of 41,144 oitavas. It has been derived as follows:

From General stamps	21,401	from 3730·4 =	5·736	
„ Herring (East Bahu)	7,950	1072·0 =	7·416	6·029
„ Lyon (W. & Mid. Cach.)	6,583	1028·0 =	6·403	
„ Cotesworth (W. Quebra Pa.)	944	288·8 =	3·268	
„ Arrastres	2,114			=0·343
Total stamps and arrastres.	38,992	6119·2		=6·372
„ Praia stamps and arrastres.	2,152			
Total produce	41,144 oitas.			

The above return of gold is good, being the largest, except that for March, yet obtained. The standard yield from the ore reduced is better than that received in April, 6·222 oits., although not quite so large as March, which gave 6·579 oits. The yield from the ore treated in the General stamps is better than was obtained in March, 5·562 oitavas per ton, and the yield from the East Bahu ore is improved, being 7·416 oitavas, as compared with 6·734 oits. obtained in April. We have had a larger supply of stone from the East Bahu than during April, though not so large as in the month of March, and the yield from that part of the mine has varied in proportion as the rich ore has been received. The produce for the month of May is large, and quite as good as could be expected, under present arrangements, from the ore treated.

COST AND PROFIT.—Produce for May being 41,144 oits.
Less loss in melting ..... 210 oits.

Leaving ..... 40,934 oits., at 7s. 7d. per oit £15,520 16 2
The cost for May is Rs. 82,339 $752, exchange 2s. 2½d. 9,091 14 11

This leaves the profit for May of ..... £ 6,429 1 3

PONTGIBAUD.—Capt. Rickard, July 17: Roure: The stollen, south of Agnes' shaft, on Agnes' lode, is prodvcing 1¼ ton of ore per fm. The adit level, south of the same, is producing stones of ore, but not sufficient to value. The 20 south is in hard ground: the lode is 6 ft. wide, producing 1¾ ton of ore per fm. The cross-cut west of St. James's shaft proceeds rapidly towards the lode. No. 1 winze, sinking below the adit level, south of Agnes' shaft, is worth 1 ton of ore per fm. No. 2 winze, sinking below the 20, south of Agnes' shaft, on St. Mark's lode, is not producing any ore. No. 3 winze, sinking below the 20, north of Richard's shaft, on the middle lode, is worth ¾ ton of ore per fm. Our stopes and tribute pitches throughout this mine are looking well on the whole.—Rosier: The sumpmen in the little shaft are about to resume the sinking of this shaft below the 85. We have set to clear the 85, south of little shaft, and hope soon to begin to open some ore ground in that direction. Nothing new in the 60 cross-cut east. The tribute is without any alteration.—La Grange: There is no change to notice in the adit cross-cut west. We have cut through the lode in the adit level, south of cross-cut, where it is 7 in. wide, composed of black flookan—rather unkindly. The stopes are yielding the same as when last reported.—Mioche: The 80 cross-cut, east of Taylor's shaft, has not yet intersected the lode. The 40, south of cross-cut, on No. 7 lode, has improved in appearance, the rock having quite changed its character, and promising to produce ore shortly. The adit south, on the same lode, is poor. The cross-cut west of railway has entered a kindly lode, showing spots of ore. We have not yet cut through it. Nothing new in any of the other levels.—Pranal: The cross-cut west, south of Bonteaux's shaft, has entered a change of ground, crossed with branches of ore. We think we are very near the lode. The stopes are looking well.—Barbecot: The 35, north of Leontine's shaft, is not looking so kindly as when last reported; still letting out much water. There is nothing cut in the cross-cut at Brot.—Argentelle: The ground is changed in the adit, west of the tin lode, from a dark close rock to a light-coloured kindly looking ground, crossed in every direction with small branches of mundic.—Surface: We have put the whim-engine to draw from Agnes' shaft, which goes admirably. We are now changing the guides in Richard's shaft from surface to the 60, when we shall be in good working trim in this part of the mine.

LUSITANIAN.—July 15: Palhal Mine: The ground in the 40 cross-cut, south of Oak shaft, is hard. The ground in the 30 cross-cut, south of the same shaft, is without alteration to notice.—Basto's Lode: The lode in the 60, east of Taylor's shaft, is 6 ft. wide, composed of quartz and a branch of copper ore, worth 1½ ton per fathom. The lode in the 60 west is still standing. The lode in the 50, east of Taylor's shaft, is 3 ft. wide, producing stones of ore. The lode in the 50, west of this shaft, is 1½ ft. wide, worth 1½ ton per fm. The lode in the 38 west is 4 ft. wide, the south part of which is producing good stones of ore.—Levels East and West of River Shaft: The lode in the 50 east is 2 ft. wide, having good stones of ore in it. The lode in the 50 west is 1½ ft. wide, composed of mundic, quartz, and stones of ore. The lode in the 38 east is 3 ft. wide, having in it a branch producing stones of ore. The lode in the 28 east is 4 feet wide, composed of quartz and a little ore, with spots of lead. The lode in the 18 east is 4 ft. wide, composed of quartz, and spotted with lead. The lode in the adit, east of Pinto's shaft, is 1 ft. wide, composed of flookan. The lode in the adit, west of Perez' whim-shaft, is worth 1½ ton per fathom. The lode in Jackson's winze, below the 38, is 1½ ft. wide, worth 2 tons per fm. The lode in the stopes No. 1, in the back of the 50, west of Ernesto's winze, is worth 1½ ton per fm. The lode in the stopes No. 2, in back of the 38, west of mark, west of Clondino's winze, is worth 1½ ton per fm. The lode in the stopes No. 3, in back of the 50, east of Taylor's shaft, is worth 1 ton per fm. The lode in the stopes No. 4, in bottom of the 28, west of Clondino's winze, is worth 1 ton per fm. The lode in the stopes No. 5, in back of the 38, east of Clondino's winze, is worth 1 ton per fm. The lode in the stopes No. 7, in back of the 50, west of Taylor's shaft, is 2 ft. wide, with a branch of ore in it worth 1 ton per fm. The lode in the stopes No. 8, in back of the 28, east of Feguerida's rise, is worth ¾ ton per fm. The lode in the stopes No. 9, in back of the adit, west of Perez' whim-shaft, is worth 1 ton per fathom.—Mill Lode: The lode in the 50, east of River shaft, has not been taken down for the last ten days. The lode in the 50, west of River shaft, is worth ½ ton per fm. The lode in Roderique's rise, above the 38, west of the caunter lode, is worth 1 ton per fm. The lode in the rise above the 28, against Joas's winze, is 1½ ft. wide, producing stones of ore; we expect the communication will be made between the rise and Joas's winze next week, when the 18 and 28 fm. levels will be well ventilated. The lode in the 28, east of Junction winze, is 9 in. wide, having in it small stones of ore. The lode in the stopes No. 11, in back of the 18, east of Dea's winze, is worth 1 ton per fm. The lode in the stopes No. 12, in back of the 38, west of the caunter lode, is worth 1 ton per fm. The lode in the 28, west of the slide lode, on a western branch, is 3 in. wide, yielding small stones of ore, and from it there is coming a large stream of water.—Caunter Lode: The lode in the 50, west of Taylor's shaft, is in disordered ground.—Great Caunter Lode: The lode in the 20, west of Oak shaft, is 3 ft. wide, unproductive. The lode in the stopes No. 13, in back of the 20, west of the slide lode, west of Oak shaft, is worth 1½ ton per per fm. of copper ore and lead mixed.—Ponte Lode: The lode in Lawrance's winze, below the adit, west of the River Caima, is 1 ft. wide, producing good stones of ore.—Slide Lode: The lode in the rise above the 28, against Abel's winze, is 3½ ft. wide, unproductive.—House Lode: The lode in the 20, west of the slide lode, west of Oak shaft, is 9 in. wide, and poor.—Carvalhal Mine: The lode in the adit level, west of the River Caima, is 2 ft. wide, composed of rusty quartz. The lode in the 10, west of Henrique's winze, is 1 ft. wide, composed of quartz, spotted with lead. The lode in the stopes in back of the 10, west of Henrique's winze, is 6 ft. wide, with lead scattered throughout it worth 5 cwts. of lead per fm.

SALES OF LEAD ORES.

LEAD ORES SOLD DURING THE QUARTER ENDING JUNE, 1861.

Mines.	Tons.	Amount.
Minera	1301	£16,426 1 6
Lisburne	695	9,132 7 9
Isle of Man Mining Company	400	6,582 10 0
Wheal Mary Ann	285	5,229 2 0
Dyliffe	403	5,184 18 0
Wheal Frank Mills	345	4,854 12 6
East Darren	285	4,226 3 0
Cwmystwith	334	4,115 4 7
Westminster	300	3,665 0 0
Cwm Erfin	227	3,477 14 6
Rhosesmor	180	2,301 13 0
Exmouth	200	2,025 0 0
Mount Pleasant	165	2,016 12 6
Dyfngwm	161	2,006 3 6
Vale of Towy	162	1,898 16 9
Goginan	107¼	1,738 12 3
Laxey (May)	100	1,602 10 0
Wheal Wrey Consols (May and June)	114	1,564 17 6
Coetia Llys	106	1,419 2 0
Maesyrerwddu	102	1,377 8 3
Parys	103	1,315 16 6
Cargoll (April)	89	1,165 10 0
Cefn Cwm Brwyno	102½	1,157 7 0
Llanerchyraur	83	1,088 2 0
Keswick	85	1,058 12 6
North Minera (April)	70	897 15 0
Newtownards (June)	70	854 0 0
Bryn Gwiog	57	721 3 0
Rhoswydol	59	698 16 6
Deep Level	57	694 14 6
Aberdovey (April and June)	52	662 0 0
Carmarthen United (April and June)	53	633 19 6
Llanfair (June)	24	600 1 9
South Darren	33	593 6 2
Nanteos United	55	572 1 2
Pool Park	45	552 0 0
Herward United (April and June)	48	534 0 0
Maesysafn	46	528 14 6
Bryn Arian (April)	32	435 10 0
Holywell Level (May and June)	30	430 7 6
Nanty	29¼	380 18 0
Miningaff (April)	30	359 5 0
Casara (May)	28	350 8 0
Brynford Hall (April and June)	26	326 12 0
Roman Gravels (May)	26	311 0 0
Bronfloyd (June)	20	290 0 0
East Tamar (April)	20	281 0 6
Tymaen (June)	20	265 0 0
Orsedd	18	235 18 0
Cardigan Consols (May)	18	232 9 11
Alt-y-Crib	16	218 4 6
Bryntail (May)	17	212 10 0
Llangynog (May)	16	201 12 0
Speedwell	16	189 13 0
Tyntwil (April)	15	184 10 0
Ballyvirgin (April)	21	180 18 6
Grosvenor (April and June)	13	165 10 0
Pyllancochion (June)	13	143 7 6
Lady Elinor (April)	10	135 10 0
North Laxey (May)	10	126 0 0
Nether Hearth (May)	10	101 15 0
Fronisa (April)	9	112 14 6
Hendre Ucha (June)	8	96 13 9
Catherine and Jane Consols (May)	8	97 16 0
North Exmouth	8¾	90 4 8
Lower Park (June)	8	90 4 0
Felynpium (April)	8	82 12 0
Trelogan (April and June)	6	78 10 0
Nant-y-Ingo (April)	6	72 9 0
Talacre (May)	4	53 14 0
Cae-conroy (June)	4	42 0 0
East Merilyn (May)	3	40 10 0
Dolgoch (June)	1	10 2 6
Brynpyll (April)	1	10 0 0

SALES OF BLACK TIN.

BLACK TIN SOLD FOR THE QUARTER ENDING JUNE, 1861.

Mines.	Tons.	Amount.
Dolcoath	241	£17,236 14 6
Carn Brea	126	8,655 0 0
Polberro	102	7,289 9 0
Par Consols	95¾	6,583 6 4
St. Day United	71	4,536 18 5
Great Fortune	56¾	4,304 0 2
Pedn-an-drea United	58	4,051 8 1
Great Wheal Vor	54½	3,937 7 9
Charlestown United	56¾	3,840 19 11
West Fowey Consols	51	3,541 7 10
Wendron Consols	49	3,468 6 5
Great Wheal Busy	43½	3,199 13 1
Drake Walls	38¾	2,755 2 3
Tincroft (April and May)	38¾	2,646 9 10
Ashburton United (April and June)	36½	2,611 3 8
St. Austell Consols	30½	2,121 9 0
Carnyorth	28¾	1,796 19 3
Durlo (April and May)	24	1,701 15 6
South Carn Brea	21¾	1,476 14 0
Polbreen	18	1,316 6 5
Penhalls (May and June)	17¾	1,253 7 2
Redmoor (April and May)	14¾	1,024 13 5
Brea Consols	12	851 2 6
Bottle Hill (June)	11¾	849 4 2
New Wheal Vor and East Wheal Metal	12½	838 8 6
East Wheal Lovel	9¼	654 7 6
Trevenen and Tremenheere (April and May)	8¾	602 11 1
Leeds and St. Aubyn	8⅛	556 7 6
Gurlyn	7½	536 6 10
Treworlis	7½	514 4 8
Spearne Consols	6	392 15 0
West Basset	4¾	338 8 1
Wheal Hearle (April)	4¾	322 5 0
Wheal Lushington (May and June)	4½	296 14 4
Wheal Trefusis	4	258 13 4
Wheal Union (June)	3	205 11 3
North Basset	—	172 10 6
United Mines	2½	169 12 2
Penhale Moor	1¾	127 14 6
West Margaret (April and May)	1¾	114 13 0
Rosewarne Consols (April)	1½	102 6 0
East Trevenen (June)	1	62 16 0
West Par	1	60 4 2

BY PARCEL.

North Basset	304	12 5
Great South Tolgus	78	11 0

MINERAL DEVOTION.—At a meeting of the Cornwall Mineral Association, Mr. F. C. Singleton (the Chairman) concluded his opening address with the following morceau of the finest specimen of cant that we have witnessed, even in Adelaide, for many a day:—"We cannot but admit (and we should not be ashamed to do so) that the Allwise Providence of God is manifest in this crisis. Such being the case, it will not, I am sure, be considered by you out of place for me to request that each of you will, before commencing the business of what may hereafter prove to be a great company, silently and inwardly, implore the blessing of the Almighty in this our undertaking, and beg that He will give to those whom you are about to entrust with the management of your affairs wisdom and fidelity. Your hearts and consciences, and I think I may say your experiences, confirm the truth of what you have been reading and hearing from your youth up—'Except the Lord build the house, they labour in vain that build it;' except the Lord keep the city, the watchman watcheth but in vain.'" All ye preachers, licensed or not, think of that from a devoted mining speculator, and "hide your diminished heads!"—*Adelaide Observer*.

SILVER-LEAD ORES IN SOUTH AUSTRALIA.—On Thursday last Messrs. Solomon sold 17 tons of silver-lead ore, at 6*l.* 11s. per ton, delivered at Port Adelaide. We are assured that the ore contained more than 17 ozs. of silver in a ton of ore, and 55 per cent. of lead. The attention of the public is evidently devoted too exclusively to copper ores.—*Bell's Life in Adelaide*, May 11, 1861.

Mining Correspondence.

BRITISH MINES.

ABERDOVEY.—A. Ede: In the cross-cut on the south lode at the 32 we have gone through some good branches of lead ore. The stope north of winze, on the main lode, is not quite so good as last reported. In the 12 there is no change to notice, the lode still producing some good work. The dressing and other operations are progressing satisfactorily.

ALFRED CONSOLS.—S. Uren, T. Hosking, July 24: In driving the 150, east of Davey's engine-shaft, on the main lode, we have cut a branch on the north side 4 in. wide, worth 7*l.* per fathom; the main lode is without change. The lode in the 140, driving east of said shaft, is 3½ ft. wide, spotted with ore. The north part of the main lode, driving east of Roberts's shaft, at this level, is 18 in. wide, worth 20*l.* per fm. The main lode in the 130, east of the above shaft, is 5 feet wide, worth 8*l.* per fm. In the 120, on the main lode, we have driven a cross-cut north 6 ft., and cut into a branch 6 in. wide, but have not reached the north wall; it is composed of capel and spar, with good stones of ore; we shall see more of this in a day or two. No lode intersected yet in the 140 cross-cut north. Roberts's stope, in back of the 140, is worth 20*l.* per fm. Hosking's stope, in bottom of the 130, is worth 12*l.* per fathom. Floyd's stope, east of ditto, is worth 30*l.* per fm. Richards's stope is worth 12*l.* per fathom. There is no other change to notice.

BEDFORD CONSOLS.—Captain Mitchell, July 24: The middle adit level has been extended east on the No. 1 south lode about 10 fathoms; the lode has been small the greater part of this driving, and the ground generally hard, being mixed with spar, &c.; the ground, however, in the last 6 feet shows a better appearance. The cross-cut has been extended south about 9 fms. 2 ft., and, judging from the character of the ground, I am of opinion that a productive lode will be met with when intersected, and I hope we shall reach it during the next three months, provided the ground continues of the same favourable character. For the future working of the mine I would recommend the driving to be resumed on the north lode, by three men and three boys, in order to effect a communication with Sims's shaft, which when done would enable us to open out the ground between this point and the junction of the tin lode seen in the level above, which is now about 80 fms. from it, where I think there are great chances of success. I also recommend to drive on the No. 1 south lode, by two men and two boys, which number I think quite sufficient for this place for the time, there being a deficiency of air for six men to good labour. I would here remark that this end is approaching the summit of the hill, and should be continued on, as I think the main chances are in this direction. I would also recommend the continuation of the cross-cut south, by four men, and employ as many tributers as may be thought advisable. We have at present two pitches working by four men, at about 12s. in 1*l.* on the average, and one in back of the middle adit, where the lode is worth ⅛ ton of good ore per fathom, and one in back of the 27, where the lode will yield 3 tons of ore per fm. In conclusion, I beg to say that if these points are fully developed there is a fair probability of making some good discoveries. I calculate we shall have about 40 tons of ore by the end of this month, which can be sampled if thought advisable, the value of which at the present standard I should say might be taken at about 12*0l.*

BEDFORD UNITED.—J. Phillips, July 23: We continue to drive by the side of the lode in the 115 west. The lode in the winze sinking in the bottom of this level is 2 ft. wide, and worth 3 tons of ore per fm. The lode in the 103 west is of the same value as last reported. The stopes in the back of this level and the 90 west are yielding the same quantity of ore as stated last week. No important change has taken place in any other part of the mine.

BICKLEIGH VALE PHŒNIX.—J. Hambly, July 24: In the adit end, driving north on the cross-course towards the lode, the ground has been harder than lately, and the killas is of a darker colour by the side of the cross-course. The water appears to be flowing from a branch of spar which we have driven through coming down from the back and underlying south. I find the ground now changable, with still a little water flowing through the ground; there are more branches and floors of quartz or spar than we have had before, and I see no reason why we may not soon cut into what we much want to see—a course of copper ore.

BORRODALE.—W. Dixon, July 25: The workings on Rhoyde's stage are progressing favourably; the appearance for wad is better this week. The rise on waddy pipe (where we have two men) has given us some wad of the best quality, and the pipe is at present composed of quartz and decomposed wad. The grand pipe has no alteration to notice.

BRONFLOYD.—J. Lester, July 24: No. 1 Lode: We are cutting through this lode as fast as possible in the 13 below adit; it is now exposed for 5 ft., and is principally composed of carbonate of lime, of the same character as we had in the 17 before we got the ore. The lode is letting out a large quantity of water, and is of a promising appearance. We have several feet yet to open before we shall reach the north wall of the lode. No alteration elsewhere in the mine.

BRYN GWIOG.—July 23: At the engine-shaft the men are engaged in cutting ample room to commence driving out a new level at 150 yards deep. The winze east of ditto shaft and under the 132 is without any change since last advised. The east stope in this end is improving, and will yield about 2 tons per fm. The lode in the 132 west is widening, and much easier to drive, with a few specks of ore cutting, and is letting out a strong fissure of water. The stopes in the east and west ends of No. 1 winze are equally as good as last reported on. No. 3 winze we were obliged to suspend, owing to the increase of water in sinking. The 105 west is without any further improvement.

CAMBORNE CONSOLS.—W. Roberts, July 24: There is no improvement in either of the tutwork bargains since last reported. We shall sample this morning 10 tons of ore.

CARADON CONSOLS.—W. Rich, July 23: The 54 cross-cut north is still wet; the granite here is very jointy, and is of the most promising description for copper. Should we be fortunate enough to intersect a lode in the sort of ground we now have, there is every probability of its being found productive. The lode in the winze below the 54 is large, and carries good stones of ore. There is nothing new in the south cross-cut. The lode in the shaft has not been taken down during the past week; it, however, carries regular and well-defined walls, and every effort is being made to force on the sinking as fast as possible.

CARN CAMBORNE.—W. Bishop, July 20: On the south lode we have opened about 9 ft., and find it producing splendid stones of yellow ore and green carbonate. On Monday we shall dial it, and write you more particulars. There has been no lode taken down in back of the adit during the past week; it is now standing for 5 ft. high, and appears to maintain its regular size; it will be taken down on Monday, when you shall hear of its character. We are down 2½ fms. below the back of the level in the shaft, and hope to see the 12 dry by next week.

CEFN CILCEN.—J. Williams, July 24: The 73 yard level, driving east of the shaft, has intersected the shale bed, is now unproductive, and the lode is disordered by it. The rise in the back of this level is without any alteration of importance since my last; we fully expect to rise through the shale this week, when we anticipate a good result. The 60 yard level, driving east of footway shaft, is progressing satisfactorily, having intersected the north lode in this end, as well as the main lode. The main lode and the north lode are only 3 feet apart—the main lode is unproductive at present, but the north lode produces good ore; the lode is 10 in. wide, orey throughout, and will yield fully 1 ton of good quality ore per fathom, and by all appearance indicates further improvement, without a doubt, when the two lodes form a junction, where we may expect a large course of ore. The cross-cut under the 50 yard level to the north lode, east of footway shaft, which was intersected on Saturday last, is in a splendid course of ore, the lode is 9 in. wide, nearly solid lead, and will produce 3 tons of ore per fathom. A few fathoms further east of the said cross-cut we have pitched another cross-cut to the north lode, and have come into a shaggy nature of a swallow, or water-course, composed of sand, clay, and lumps of solid ore, varying from 1 lb. to 12 lbs, and have only cut into the shag this morning, and by the appearance we are coming into a good course of ore, so I shall be able to give you a correct account of this place in my next. At the pulley shaft, sinking below the 60 yard level, the lode is small, but very encouraging; the ground is hard, but we have only seen a little into it since my last.

COLLACOMBE.—S. Mitchell, July 23: During the last week the 105 has been driven west 2 fathoms; the lode is composed of capel, quartz, and good copper ore. The winze in the bottom of the 96 has been sunk 6 feet; the lode is 5 ft. wide, composed of capel, quartz, and 1 ton of copper ore per fathom. Other points of operation continue without any material alteration.

CORNUBIA TIN.—W. H. Gray, July 24: Agreeably to last report, the western shaft is completed to the 30, but in going down from the last course of timber we find the rib which has latterly somewhat interfered with the rapid progress made at the top of the sink shows signs of immediate disappearance, and a few feet deeper will make considerable difference in the speed with which we shall be able to push out the cross-cut, it has been determined to go down a little further prior to taking up the driving. The beautifully decomposed character of the strata now in the bottom can scarcely fail to give both size and richness to the lodes, and I look forth to the most satisfactory results upon intersecting them both north and south of this shaft, whilst the chances of hard ground below appear as far as ever from being realised. In the eastern shaft we have passed the 20, and after going down a few feet more I shall be obliged temporarily to suspend forking, in order to secure the plat, fix plunger, &c., which must now be done, the weight of the present drawing-lift getting too much to hang overhead, and the quantity of water which may be carried to a cistern at this point will allow of clearing to the 40 by the aid of a much smaller lift; to do this, however, is a work of time, inasmuch as new rods, connections, and many other items, must be procured (although the plunger and bottom we have on the ground will suit the purpose), for all of which the directors must exercise the necessary patience, especially as when this job is completed we shall be instantly adding all the mine water to the surface supply for winding purposes. The level bringing up to relieve the water from the tail of the machine, which is nearly complete, and I hope soon to be able to report the pit in the course of building. The machinery part of this is also having the best attention, so that we may have all ready by the required time for clearing the several levels, and when we can get to bear upon these points it will assuredly be with the most favourable results.

CROOKHAVEN.—H. Thomas, July 22: The south lode, driving west at the 40, is still improving in appearance; the interstices of the matrix being more or less filled with ore; a little further improvement, and it will be good saving work. We broke some very good stones of yellow copper ore from the end to-day, better than anything we have yet seen; the strongest part being now near the footwall, which for some time I have been anxious to see; if the lode continues to improve, I would advise to put three miners and three labourers in this end at the next monthly setting, which will be on the 4th of next month. The ground in the 40 fm. level cross-cut, north from engine-shaft, is much the same as when last reported; however, last week we met with some fine-grained yellow ore and mundic mixed in the stone, which plainly indicates the ground to be mineralised, and from the nature of the country, I am led to believe the north lodes will be productive when intersected. We are getting down in the western trial-shaft very satisfactorily, and are still in the same fine channel of ground, which I am convinced will continue to a great depth—in fact, I believe it is the flookan of the great champion lode. There is nothing new to remark at the engine-shaft sinking under the 50; the men are doing their utmost in this bargain. The machinery and pitwork are all in good working order.

CUDDRA.—J. Webb, A. Cundy, July 25: The lode is not quite so good for copper in the 100 end, east of engine-shaft; it is now 1½ ft. wide, producing copper ore and gossan. We have passed through a shoot of ore 5½ fms. long, and from appearances the back will turn out several tons of good ore. In the 60, west of Walker's, we have been taking down the lode, which has turned out some good work for tin; but a slide has cut off the lode for the time, and it is very probable it will be found again good on the other side: we are likely to have much tin in this direction, and shall hasten on this level. Walker's shaftmen are engaged putting in tramroad, &c. In the 60, east of Walker's, we have much tinstuff lodging in the stopes ready to be brought away as soon as the tramroad is ready. The 60 fm. level stopes are producing tin just the same as noticed last week. The machinery is all in good working order.

DALE.—R. Niness, July 25: The appearance of the Pipe vein continues much the same as when I last wrote, and yielding about the same quantity of ore. Monday next is our sampling, when I trust to be able to sample nearly, if not all of, 30 tons.

DEVON AND CORNWALL UNITED.—T. Neill, July 23: Capt. Davey was here on Thursday, and dialled the rise in the back of the deep adit level against the new shaft, and he finds that, owing to the lode in the rise having a much faster underlie than was anticipated, there is more ground to rise than was expected when the last report was sent; the ground continues of a favourable character for progress. I do not see any change to notice in any part of the mine. I am glad to find the line of rods, &c., is to be put up and no time will be lost in carrying out the work.

DEVON NEW COPPER.—P. Hawke, July 24: The distance driven into the great north lode west, in the 78, is 12 ft. 6 in., and we have come across a leader of quartz, mundic, and yellow copper ore, for about 1 ft. wide, which seems to be continuous both east and west: its bearing is 10° to the south of east, and 10° to the north of west. I intend from to-day to open a little both east and west here; the pare will be so arranged that the cutting into the lode will be continued as well. The produce from the leader referred to is of a saving quality. The depth sunk below the 78 is 8 ft. 9 in.

DEVON UNION.—J. Donnall, July 23: There is no alteration to report in the engine-shaft. We have erected the pulley-stands and poppet-heads, in order to draw the stuff from Quick's shaft. We have also cut ground for cistern-plat, and are in course of cutting bearer-poles, for the purpose of fixing the lift.

DYFNGWM.—E. Davies, July 20: Since last bi-monthly report the water has continued in the 70, in consequence of the excessively dry weather; it is to-day, however, out, and operations will be resumed there. In the 60, Painter's winze has been sunk 3 fms. 3 ft. 11 in. deeper, when it communicated with a driving from an old stope in back of the 70 west; in the side of this winze 5 fms. 5 ft. 4 in. of orey ground was broken; the sinking and stoping produced from 20 to 30 cwts. per fm. In back of the 60 east 18 fms. 0 ft. 8 in. of orey ground was stoped, and 7 fms. 1 ft. 10 in. of extra width; this latter will show we have a large lode; it is so. The length of the two stopes is nearly 100 ft., and for that length it is from 6 to 9 ft. wide, containing fine ore, though not for the whole length, but ranging from 20 to 30 cwts. per fm. In the 50 east 20 fms. 2 ft. 2 in. was stoped; the lode here also for half the length is rich, making 2 tons per fm.; the remaining portion rather poor, consequently diminishing the average yield; it, however, looks well, and may any day again become rich all over. The 40 east has been driven 5 fms. 2 ft. 2 in., and has been a highly successful driving; the lode continued to improve; in the richest part it has made fully 3 tons per fm. The men are now engaged taking down the lode driven upon for the last 5 fms., and it turns out excellent stuff, from 1 to 3 tons per fm.; it tells its own tales when it reaches the dressing-floors. In back of this level 21 fms. 2 ft. 2 in. was stoped; the greater part of this was a trial stope on a bunch of ore some 15 fms. behind the present end; in rising the lode became disordered, so that it failed to make a profitable bunch of ore; the more regular part produced 1 ton per fm. In the 40 west 2 ft. was risen, preparatory to letting two stopes to eight men, which has now been done. In the 30 east we have made two short drivings to test the lode on the south part, 1 fm. 2 ft. east, and 1 fm. 5 ft. 6 in. west; they produce but little ore. We have now four men driving east on the main lode, so as to enter the rich orey ground opened in the 40; there is a piece of barren ground some 6 fms. in length to drive before we enter the orey part. We have gone on surprisingly with the drawing and dressing, considering the extraordinary short supply of water during the two months. It is the steam-engine that has been our pillar of support; had it not been for this I am quite satisfied we should not have had one-tenth of what you will find below. When drawing with steam every day we consume about 3 tons of coals per week. We have shipped 46 tons 5 cwts. of ore, and have now ready to ship 31 tons: of this 77 tons 5 cwts., I reported in my last 7 tons on hand, making 70 tons 5 cwts. of lead ore, and 16¼ tons of copper ore.

EAST BUDNICK AND MOUNT.—Wm. H. Reynolds, July 20: The south lode is poor thus far, and the men going on with the cross-cut in search of another south lode.

EAST CARN BREA.—T. Glanville, July 20: Tutwork Setting: The engine-shaft to sink under the 50 by nine men, at 20*l.* per fm. The 50 to drive east of the cross-cut by four men, at 6*l.* per fm. The 50 to drive west of the cross-cut by four men, at 9*l.* per fm. The winze to sink under the 40, on the middle lode, east of the cross-cut, by four men, at 4*l.* per fm.; the lode yielding 2 tons of ore per fm. The winze to sink under the 40, west of the cross-cut, by four men, at 4*l.* per fm.; the lode yielding 2 tons of ore per fm. The 50 cross-cut to drive south by six men, at 7*l.* per fm. The 40 to drive east on the south lode by four men, at 7*l.* per fm.; the lode yielding 3 tons of ore per fm. The winze to sink below the 26, west of the cross-cut, by six men, at 6*l.* per fathom. The winze to sink in the bottom of the 20, east of the cross-cut, by four men, at 6*l.* per fathom. The 20 to drive east by two men, at 5*l.* per fm. In the 30 cross-cut, south of the western shaft, we have cut the lode—it is producing 2 tons of ore per fm.; we are now rising to communicate with the winze sinking below the 26, by six men, at 5*l.* per fm. The 40 to drive west on the south lode, by six men, at 7*l.* per fm. No lode has been taken down in the past week

EAST DEVON GREAT CONSOLS.—T. Richards, July 23: The engine-shaft is sunk to the depth of 50 fms.; ground continuing equally favourable for mineral and progress. In the 40 west the lode is very promising, and producing a little copper ore, with water still issuing freely from the end. The cross-cut south continues much the same.

EAST GUNNIS LAKE AND SOUTH BEDFORD.—James Phillips, July 25: The ground in the bottom of Gard's shaft is still presenting more favourable indications than when last reported; almost every head contains malleable copper and black ore. We believe we are at last nearly through the capels in the cross-cut in the shallow adit; we have put in a bore-hole, and found easy ground within 6 or 8 in. of the end. There is no alteration in any other part of the mine.

EAST PROVIDENCE.—T. Uren, July 23: The new shaft is sunk nearly 5 fms. below the 20; the ground is favourably for sinking, and the lode here is worth 7*l.* per fm. In he 20, east of new shaft, the lode is worth 4*l.* per fm. We have commenced stamping, and shall have a parcel of tin ready for market in the course of a few weeks.

EAST ROSEWARNE.—J. James, July 20: The ground in the 55 cross-cut is without change to notice. We expect to cut the lode shortly. In the 43 east we are driving on the north branch referred to in last report; it is 6 to 8 in. wide, and producing good stones of ore; I think it to be another and a distinct lode. In the 43 west the lode is greatly improved. I have this day broken from towards the back of the end a good pile of ore; it is about 1 ft. wide, and seems to be making down. From the copious flow of water, and the very promising character of the lode, we may reasonably expect a further improvement. I value the present end at about 10*l.* per fm. There is no particular change in the 22 cross-cut. We expect to complete King's shaft to the 22 in the course of next week. Our tribute department is much as for some months past.

— J. Delbridge, July 22: In the 55 fathom level north we have every indication of being near the lode, the ground seems to be strongly mineralised, and is letting out much water; I am of opinion the ground is likely to be congenial for copper. In the 43 fm. level west I have taken out some very fine copper ore this morning, and towards the back of the end, if this ore continues to the bottom as now in the back, worth 20*l.* per fm., I think we have every prospect of a new shoot of ore; this end is within 6 fms. of the bottom of King's shaft, which is now about the 22. I think this is a favourable indication for the western ground. In the 43 east the lode is small, but being near the intersection of another lode, both seem disordered. I think, as King's shaft is in the 22, and the 43 within 6 fms. of that point, it would be advisable to put six men in this end, and drive to shaft with all speed. We shall see more of this lode by Wednesday noon, when I will again write to you.

EAST TOLGUS.—July 24: Redruth Consols Lode: The lode in John's shaft is 18 in. wide, consisting of spar and good stones of ore, but not looking so well as when last reported; it is still dropping down rightly, and has a good appearance. In the 57 end east the lode is 1 foot wide, composed of spar and peach. The lode in the 34 end east is 2 feet wide, composed of spar, peach, mundic, and good stones of copper ore—a very promising lode. The lode in the winze sinking in the bottom of the 22, east of shaft, is 2 feet wide, producing a little saving work for tin, but not rich. The stope in the back of the 34, west of shaft, is worth for tin and copper 8*l.* per fathom. The two stopes in back of the 22, east of shaft, are each worth for tin 6*l.* per fathom. No lode or branch has been met with in the 46 cross-cut, north from John's shaft, since last reported. The ground in the new shaft, sinking from surface, is easy, and the men are making good progress.

EAST TREFUSIS.—J. Pope, July 25: In the 58, east of cross-cut, on Trelawny's lode, the lode is 18 in. wide, producing stones of copper ore, quartz, and chlorite. In the 34, east of cross-cut, on Trelawny's lode, the lode is 2½ ft. wide, unproductive. In Trelawny's flat-rod shaft, sinking below the deep adit, the lode is 3 ft. wide, containing good stones of yellow copper ore, but not enough to value. In the 22, west of the cross-course, on Smith's lode, the lode is 18 in. wide, chiefly gossan.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 20: The lode in the engine-shaft is from 2 to 3 ft. wide, worth for copper 3 tons, and tin about 10*l.* per fathom for length of shaft—a kindly lode. The lode in the 35 west is from 2 to 2½ ft. wide, producing 2 tons of very much better ore, with 4*l.* or 5*l.* worth of tin to the fm.—a fine-looking lode. The lode in the 25 east is in two parts; the south one is 8 inches, and the north one 1 ft. wide; the elvan is gone, hence we are expecting an improvement. The lode in the 25 west is 2 ft. wide, of gossan, quartz, and prian, with good stones of ore—a promising lode. We shall sell our tin on Tuesday morning.

— J. Goldsworthy, July 19: I beg to inform you that in cutting in south in the 88 there is a good improvement as far as seen, of which we will give you full particulars in a post or so. The lode in the 100, west of Davis's cross-cut, is looking exceedingly promising; we hope to report an improvement ere long. There has nothing further of the lode been seen in the 110 fm. level cross-cut since reported on; we hope to be cutting into the lode to-morrow.

— J. Goldsworthy, July 20: The lode in the 110 cross-cut has a kindly appearance. The lode in the 88 east as far as cut in will produce 3 tons of rich ore per fm., worth about 10*l.* per ton; the lode is looking exceedingly promising.

— J. Goldsworthy, July 22: I beg to inform you that in cutting in the lode in the 110 to-day we have broken some rich grey and black oxide of copper ore; very fine looking stuff. We hope to be able to see more of the lode in a day or two. The lode in the 100, east and west of Davis's cross-cut, is showing indications of an improvement. The lode in the 88 east is looking exceedingly well; I think it has improved a little since Saturday.

— John Goldsworthy, July 24: In the 110 fathom level, east of Homersham's shaft, in the cross-cut north, the north part of the lode has been cut into about 2½ ft.; it is composed of iron, capel, quartz, peach, and carrying a leader of rich ore from 5 to 6 in. wide: we hope to give you the value of the lode in two or three days, as there is a part of it still to the north of cross-cut; the lode at this point is looking exceedingly promising. The winze sinking in the bottom of the 100 will produce 1 ton of good ore per fm. The lode in the 100, east of Davis's cross-cut on the north part, is 3 feet wide, producing a little rich yellow and black copper ore, with a kindly appearance. The lode in the 100, west of Davis's cross-cut, is 4 ft. wide, producing a little ore, with a promising appearance to improve; the stopes in the back of the 100 are without change to notice, also the stope in the bottom of the 88 on the north part of the lode. The lode in the 88, west of Hitchins's engine-shaft, is composed of iron, capel, &c., and produces rich stones of copper ore. The lode in the 88 east is 3 ft. wide, composed of quartz and ore, and produces of the latter from 3 to 4 tons of rich ore per fm., worth 10*l.* per ton. The part of the lode carried in the 66 east is composed of quartz, prian, and rich stones of yellow copper ore, a kindly lode.

— J. Richards, July 25: In the 110 cross-cut north the north part of the lode is intersected, and cut into 2½ ft. It is composed of capels, iron, quartz, peach, and a leader of rich ore 6 in. wide, worth ⅛ ton of ore per fathom. There is still more lode to the north, which will be cut through before driving east and west. In the 100 east, and east of Davies's cross-cut, on the north part of the lode, the lode is disordered and unproductive. In the 100 east, west of Davies's cross-cut, on the north part of the lode, the lode has improved, being worth 1⅛ ton of ore per fm., and is exceedingly promising. In the winze (John's) sinking below the 100 east the lode is worth 1⅛ ton of ore per fm. In the 88 east the south part of the lode has been cut into; it is from 2 to 3 ft. wide, and worth fully 3 tons of ore per fm. In the 60 east the lode is exceedingly promising, and yields rich stones of yellow ore. In the 88, west of Hitchin's engine-shaft, the lode is composed of capels, gossan, peach, and good stones of ore, and is promising. The different stopes throughout the mine are yielding their usual quantities of ore.

EXMOUTH.—J. P. Nicholls, Jno. Nicholls, July 24: The lode in the 20 south is about 2 ft. wide, looking very kindly, being composed of white iron and quartz, with lead ore disseminated throughout, although not in sufficient quantity to save. The cross-cut west from the 40 south has not interected anything of value as yet. The ground in the 60 north has been rather spare for driving during the past week; the character of the lode is without change to notice since last report. The winze in bottom of the 60 is being sunk by the side of the lode; it is down 3½ fms. We have cut a small hole in the lode, but in consequence of its containing a quantity of water it was not prudent to cut through it, therefore we cannot at present state its size or value; however, from what we have already seen it is a good lode. The stope in back of the 72 north is at present yielding ⅓ ton of lead ore per fm. The tribute department is without change to notice. All the machinery on the mine is in good working order.

FOWEY CONSOLS.—F. Puckey, S. Sampson, Wm. Opie, July 22: The lode in the different ends throughout the mine are much the same as last reported. We have commenced driving the two cross-cuts we recommended at our last meeting, to prove the north and south lodes in the eastern part of the mine, where we expect to meet with good results.

FOXDALE MINES (Isle of Man).—Edw. Bawden, July 12: Beckwith Mine: The stopes now being wrought under the 102 are yielding good ore, and are worth about 20*l.* per fm. The stopes in the roof of the 90 fm. level south are yielding satisfactorily, and are worth on on average for the length now operating on (28 fms.) 11*l.* per fathom. In the 75 fm. level, extending south, being such a great distance from the engine-shaft (upwards of 200 fms.), the ventilation is naturally bad, therefore I fear it cannot be continued much longer. The stopes now being wrought from the roof of the 60 north contain nice ore, and for the length of them, which is about 30 fms., are worth 12*l.* per fm. The new shaft, sinking on this point, is progressing satisfactorily; we have just communicated it with the above workings by a 3¼-in. borer-hole, which has very much facilitated the workings here by improving the ventilation. The tribute bargains in the roof of the 30 east are looking tolerably fair, and are now yielding upwards of 1 ton of lead ore per fm. Our raisings here are about 90 tons per month.—Old Foxdale Mine: The engine-shaft is sunk about 10 fms. under the 86; it is now in strong granite, and consequently slow of progress. The 86 fm. levels, both east and west, are progressing satisfactorily; the latter will yield about 1 ton of lead ore per fm. From a cross-cut recently put north, a few fathoms behind the forebreast of the 72 east, we have intersected a nice rib of ore, yielding upwards of 100 ozs. of silver per ton; we are now engaged in taking this away, and so far as yet seen it looks very promising. The tribute bargains wrought from the roof of this level are worth 15*l.* per fm. The west level is suspended for a time, and the men engaged in driving a cross-cut south towards the new shaft, which is now sinking on this part of the mine. There are five tribute bargains being wrought from the roof of this level, worth on an average 18*l.* per fm. All other bargains here are progressing satisfactorily. Our raisings at this mine are about 80 tons per month, and yielding on an average about 50 ozs. of silver per ton.—Fargher's Mine: We have here a 34-in. cylinder pumping-engine working. Our operations have hitherto been mostly confined to clearing out the old workings, sinking the engine-shaft 18 fathoms under the bottom of the old mine, and driving a cross-cut to intersect the vein, which is large and powerful, and a promising trial. We are now engaged in the necessary work preparatory to sinking the engine-shaft for a deeper level.—East Foxdale Mine: There is a 52-in. cylinder pumping-engine recently erected, and now working here, which is intended to drain three old mines, the deepest of which is about 45 fms. The engine is now working on one, and the necessary work is so far advanced on the other two that I expect in a short time the whole will be in full operation. Mr. Smyth, the Government Inspector, has recently been here, and very minutely examined all the principal underground workings, and I believe was perfectly satisfied with our proceedings. I am glad to state that there was a dividend declared on June 30 amounting to 2704*l.*

FRANK MILLS.—J. P. Nicholls, J. Cornish, July 24: The part of the lode we are carrying in the 84 north will at present yield 7 cwts. of lead ore per fm., and is looking well for improvement; the ground here is very easy for exploring. We have extended the cross-cut west from the 72 end north about 3 fms., and intersected a branch of white iron, &c., 14 in. wide, from which a very large stream of water is issuing—in fact, it has quite drained the 60 cross-cut over, according to our expectation, and it is now almost dry. In the last-named cross-cut west we have passed through another small white flookan, since which some small branches containg spots of lead ore; the ground also has changed very much for the better since our last report, being now a soft light killas: we hope to intersect something of importance here shortly. The various stopes in back of the 84, 72, and 60 fm. levels are looking quite as well as they have for some time past, and we are still making very fair progress with our wide stull in back of the 45, where the lode is also looking well. All other tutwork bargains are without any change since our last worthy of report.

GARREG.—Wm. Sandoe, July 24: In the 20, west of engine-shaft, the lode is about 2 feet wide, producing a good mixture of lead ore, and is looking more kindly than for some time past. In the 20, going west on old lode, the lode is from 5 to 6 ft. wide, of a very promising character, and is producing good dressing ore stuff. The new shaft sinking below the 15 fm. level progresses fairly; I hope to get it through to the level shortly.

GAWTON COPPER.—G. Rowe, July 20: The part of the lode being carried in the 36 west is 4 feet wide; the leader portion on the north side is 18 in. wide, composed of soft friable spar, flookan, and mundic mixed with ore, and the south part is a very congenial capel and spar, also spotted with good quality yellow copper ore, from which a large stream of water is issuing; I consider this point is looking exceeding kindly. The lode in the 50 west is 2 feet wide, producing flookan, spar, and mundic, with occasional stones of good quality yellow copper ore; the stopes in back of the same level are yielding 2 tons of ore per fm. The tribute department is without change to notice.

GREAT CARADON.—F. C. Harpur, July 23: In the cross-cut driving north of shaft, in the 40, the ground is moderately easy for exploring, being a light killas, with veins of spar, iron, &c. The north cross-cut, same level, is without change to notice since my last, being mixed with mundic. In the end driving west of this level the lode is about 2 ft. wide, composed of quartz, mundic, prian, and blende, with occasional spots of ore, having, I think, a more favourable appearance than I have before seen.

GREAT CRINNIS.—J. Webb: The engine-shaft is going down favourably below the 110, but being sunk in the killas north of the lode I cannot say anything about the lode at present. We have a rather pleasing indication to find the lode taking down more right. The lode in the 100, driving west, is improving in appearance, a better character matrix, more copper, and promises to go on to improve. In the 100, east of shaft, we are still cross-cutting south to ascertain if there is any part of the lode there. I think it probable there is a portion of the great lode still to the south, and that it will be found the principal part. The 90 cross-cut is still going north, and without much change.

GREAT ONSLOW CONSOLS.—G. Rickard, July 23: The lode in the 122 west continues to be of a most promising character, and yields good stones of ore. The ground has further improved for being driven through, and very good progress is being made in the driving of this end. There is no important change to notice either in the 122 east or in the 107 east.

GREAT RETALLACK.—July 20: We met with a great increase of water in the shaft yesterday, and have not been able to see the bottom of the shaft since. We see some good crystals of lead in the stuff, and the ground altogether is very favourable for this ore.

— W. H. Reynolds, July 24: I beg to inform you that I was underground yesterday afternoon, and find that the great increase of water is coming from a large hollow place upon the south side of the shaft; we have pushed an iron bar into it for several feet, and taken out some good prills of lead; we shall know more about it in two or three days.

GREAT SOUTH TOLGUS.—J. Daw, July 24: We have cut a branch in the 90 fm. level cross-cut north; it is about 6 in. wide, producing some good stones of copper ore, and is underlying north very fast, but cannot say much about it for a few days. No alteration in any other part of the mine. We have sampled to-day 155 tons of ore.

GREAT TREGUNE CONSOLS.—Capt. Richards, July 24: I found the lode in the 80, west of the engine-shaft, to be full 3 ft. wide, being composed of friable and compact quartz, prian, mundic, capel, flookan, and good stones of rich yellow copper ore. The leader or orey part being 18 in. wide, and very promising; the water percolates freely from the bottom part of the end, which probably indicates a favourable change.

GREAT WHEAL ALFRED.—W. Bugelhole, J. Delbridge, July 24: Copper House Shaft: Men are now engaged in putting in the skip-road in the above shaft from the 220 to the 230. The horse north and south parts of the lode in the 220 west altogether are 8 ft. wide, worth 6*l.* per fathom. The lode in Kemp's stope, in back of this level, is worth 15*l.* per fm. The stope east of shaft is worth 10*l.* per fm. The south part of the lode in the 210 west is improved; the lode is now 3 ft. wide, and good stones of ore in it; the principal part is still standing north. We shall drive 2 or 3 fathoms further west before we cut through the north part of the lode. The lode in No. 1 stope, in bottom of this level, is worth 40*l.* per fm.; No. 2 stope is worth 11*l.* per fm.; No. 3 stope is worth 27*l.* per fm.; No. 4 stope is worth 50*l.* per fm. No. 1 stope, in back of this level, is worth 25*l.* per fm.; No. 2 stope is worth 28*l.* per fm.; No. 3 stope is worth 26*l.* per fm.; No. 4 stope is worth 19*l.* per fm.; No. 5 stope is worth 20*l.* per fathom; No. 6 stope is worth 26*l.* per fm.; No. 7 stope is worth 36*l.* per fm.; No. 8 stope is worth 35*l.* per fm.; No. 9 stope is worth 30*l.* per fm.; No. 10 stope is worth 32*l.* per fathom. No change in the 160 cross-cut. We sampled yesterday 300 tons of average quality copper ore.

GREAT WHEAL BADDERN.—J. Hampton, John Jenkin, July 22: We have completed the plat at the 63 in Hill Brothers engine-shaft, and have to-day commenced to drive cross-cuts north and south to intersect the lodes and branches by 12 men, at 170s. per fathom; ground at present is much the same as for some time past, producing occasionally stones of good lead ore. The new shaft near the railway is now sunk from surface 5 fms.; the heavy rain during the last few days has increased the water in the shaft beyond our expectations, and which will probably somewhat retard our sinking, unless the weather proves more favourable; we intend to push on at this point as fast as we possibly can. The workmen in the railway tunnel are getting from the lode stones of good lead ore, looking very promising.—P.S. We have decided to erect a horse-whim on the new shaft to prepare for an increase of water; we have one on the mine.

GREAT WHEAL BUSY.—J. Delbridge, J. Petherick: In the 120 rise there is no change to notice. In the 120, east of Offord's, the lode is large, with spots of ore, but cannot report tin. In the 110, east of Offord's, the lode is 5 ft. wide, worth 10*l.* 10s. for tin. In the 100, east of Offord's, is worth 10 to 12 tons per fm. Nos. 1 and 2 winzes are worth 12 tons per fathom. In the 90 east the lode is 12 ft. wide, good for ore and tin. In the 90, Kitelee's winze is worth 16 tons. Chenail's, 12 tons. Matthews's shaft, 10 or 12 tons. In the 80, east of ditto, there is a little tin. In the 70, east of ditto, there is a little tin. In the 100, 90, 80, and 70 cross-cuts west, tin; no change to notice. In the 50, west of shaft, the lode is very large, spotted with ore. Other things throughout the mine are much as usual.

GREAT WHEAL MARTHA.—H. Rickard, July 24: The ground in the engine-shaft remains without alteration; the men are working in good spirits from two o'clock on Monday mornings until ten o'clock on Saturday nights, in order to get the shaft down for a 52 fm. level as quick as possible. The lode in the 40 east is much the same as last week, producing copper ore of good quality, and easy for progress. The rise in the back of the 30, towards Thomas's shaft, on the lode, is progressing satisfactorily. The 20, west from Thomas's shaft, on the south part of the lode, is not yielding quite so much ore as it has been doing; I intend to cross-cut north through the lode, and anticipate good results by so doing. The tribute department is without alteration—looking first-rate; I shall be obliged to suspend several of our present pitches now working, as we have not room enough on the floors to contain the ore, until our crusher is ready, which I hope will not be long. The engineers are busily engaged in putting in the engine, &c. I took samples on the mine on Monday last for 170 tons (computed) of coppery mundic of fair quality, for sale on Monday next by tender, and shall sample on Friday upwards of 200 tons of copper ore, and weigh off May ores to the purchasers.

GREAT WHEAL VOR UNITED.—T. Gill, F. Francis, S. Harris, July 23: In the 142, driving west of Metal engine-shaft, we have intersected the lead branch and the slide that we cut in the shaft in sinking from the 132 to the 142; the lode is disordered, but the end is at present worth about 6*l.* per fm. In the 142, driving east, the lode is divided into two distinct lodes, about 100 feet apart, but we are of opinion that they will come together again in driving east from their bearing; the south part is worth about 20*l.* per fm., and the north part 30*l.* to 35*l.* per fm. In the 132, driving east of Metal engine-shaft, on the lode, the lode is about 1½ ft. wide, yielding good stones of tin, which looks very promising under the slide; it shows the same indications that we have under the slide in the 142, east of Metal shaft. In the 132, driving west of Metal engine-shaft, the lode is 2 feet wide, worth about 7*l.* per fm. The rise in back of the 122, east of Metal engine-shaft, on the lode, the lode is 2 feet wide, and poor, but looks promising; the ground is improved within the last 6 ft. We have no change in any other part of the mines since reported on last week. We are making good progress in sinking our shafts.

GURLYN.—J. Curtis, W. W. Martyn, J. Rees, July 24: The 60 is driven east of sump-whim shaft 3 fms.; the lode for this driving has been worth about 16*l.* per fm. for copper ore; at this level the men are rising against the said shaft to bring the kibble to this level, which will take about fourteen days to complete. All the other bargains are without any material change to notice since last report.

GWYDYR PARK CONSOLS.—W. Smyth, July 25: We took down the lode in the deep adit yesterday; it is rather improved since last reported, being now about 18 in. wide, composed of spar, blende, and fine stones of lead ore, good saving work. We are getting on well in driving.

HAWKMOOR.—J. Richards, J. T. Phillips, July 23: The lode in the 25, east of Rowe's rise, is fully 3 ft. wide, and worth 3 tons of copper ore per fm. The lode in the stopes in back of the 25 is worth 2 tons of copper ore per fm. The pitches in and throughout the mine are turning out fair average quantities of copper ore.—West Hawkmoor: In the adit level west, on No. 2 lode, the lode is producing some good stones of copper ore of good quality, and is altogether of a very promising character.

HINGSTON DOWN CONSOLS.—T. Richards, July 24: Morris's engine-shaft is down the required depth for the 130, and driving west has been commenced. The 120 west is producing a little rich ore, and altogether more promising. The rise in the back of the 110 is communicated by borer-hole with the winze in bottom of the 100. The 100 west will produce from 3 to 4 tons per fathom. The stopes in bottom of the 100 are looking well, and will produce 7 tons of ore per fm.; the stopes in the back will produce 6 tons per fm. The 85 and other points in operation are without important change.

HOLMBUSH.—R. Pryor, T. Woolcock, July 23: No lode has been taken down in the 175 fm. level, east of the shaft, since last reported, then valued at 17*l.* per fathom. We have intersected part of the cross-course in the 175 fm. level west, which is giving us more water. The winze sinking below the 160, east of shaft, is opening good tribute ground. In the 160, west of shaft, the lode is yielding good stones of copper ore.—Flapjack Lode: In the rise in the back of the 100 the lode is 3 feet wide, worth 2½ tons per fathom. The stope in the back of the 50, west of winze, will yield 7 tons per fathom. In the 20 fm. level, east of Wall's shaft, the lode is worth 2 tons per fathom. In the rise in the back of the above level the lode is looking much the same as when last reported. We have completed the tram-road, trip-plat, &c., in this level, which is answering very well. The tribute pitches throughout the mine are looking much the same as they have been for some time past. There is no change in the lead lode since last report.

HUCKWORTHY BRIDGE.—J. H. Rodda, July 24: Hitchins's engine-shaft is sunk 9 fms. below the 25; no lode has been taken down since last reported. In the 25 east at present the lode is disordered by a small cross-course; I think it is advisable to drive a cross-cut north at this level, as there is a quantity of water coming from the north side of the end, which makes me think it is from a side lode.

KELLY BRAY.—S. James, July 20: We have again resumed the 75 east by six men, and hope to make good progress as the ventilation is improved, since the winze has been holed to the 85. The lode in the 55 east has somewhat improved in the past week; it is now 1½ ft. wide, composed of quartz, blende, mundic, and good stones of copper ore: a kindly lode. The tribute department is much the same as for some time past.—Eastern Mine: We have intersected the north, or main part of the lode, in the 70 cross-cut, which is upwards of 2 ft. wide, composed of quartz, blende, mundic, fluor-spar, and spots of rich copper ore, a much stronger lode than was found in the 60 over the above-named cross-cut, fully showing that depth and patience are required to open a deep and lasting mine, which is the opinion of all practical men who have seen the ore which has been broken in the 60 and drawn to surface. We have commenced driving east on the lode which was discovered in the 70 in the past week, and intend to push on with the utmost vigour in order to get under the productive ground which was driven through in the 60 for upwards of 30 fms. in length, and the ore is now on the mine to be seen which was broken in the 60 east. The lode in the 60 east is not looking altogether so well as it did when last taken down, but it is still a very kindly lode, producing some rich ore, and imbedded in congenial strata for the production of copper ore.

KESWICK.—J. Postlethwaite, July 20: In the 20 fm. level Charles's rise is worth 5 cwts. of lead ore per fathom. Charles's stope No. 1 is worth 8 cwts. per fathom. Charles's stope No. 2 is worth 15 cwts. per fathom. Mat's stope is worth 12 cwts. per fathom. In the 30 Tindail's rise is worth 8 cwts. of lead ore per fathom. Charles's stope is worth 8 cwts. per fm. Greenwood's stope is worth 8 cwts. per fm. In the 40 Holmes's stope is worth 15 cwts. of lead ore per fm. Cheney's stope is worth 3 cwts. per fm. In the 50 north drift the lode is worth 5 cwts. of lead ore per fm. Whitwell's rise is worth 10 cwts. per fm.; Whitwell's stope is worth 10 cwts. per fm.

LONG RAKE.—F. Evans, July 24: The engine-shaft is being sunk by 16 men; the rock is a nice white limestone, and such as is favourable for lead in this district. The 48 east is producing a little more lead, but not to value yet. The 48 west has gradually improved, worth ½ ton per fm. We are clearing the 40 west and the western engine-shaft, to see how far the former is driven and the latter sunk. We do this to prepare for ventilating and working the western part in a proper manner, where the prospects for the future are of a highly promising character. The engine works well, and the water in the mine easy. All other things are carried on in the regular way.

MAUDLIN.—J. Tregay, July 20: West Mine: The lode here is composed of mundic, spar, and peach, with occasional stones of copper ore.—South Mine: The lode in the rise is about 3 ft. wide, composed of mundic, peach, and intermixed with spots of ore.

MERLLYN.—W. Sandoe, July 24: Since my last report the bottom end, west of new shaft, has been driven west home near to the boundary, the lode is about 2 feet wide, rather disordered, but producing occasional stones, with also a mixture of lead ore. We have also driven east in the cross-course about 3 fms., but find the lode to be in a very disordered state, therefore I thought it advisable to suspend the driving in this level for the present, and to resume the sinking of the shaft below this level now, while we have the favourable season of the year before us, and also to stope the ore ground from one level to the other, and this we have commenced doing by four men, and the sinking by eight men. In the 20, going east from new shaft, the appearances are a little more favourable in the past week. We have broken some nice stones of lead ore, with also a strong mixture of calamine, clay, &c., and the ground altogether strongly indicating our near approach to the great north and south lode, which I believe will produce large quantities of lead ore by-and-bye.

MICHELL.—W. Sandoe, July 24: The new shaft is sunk about 21 yards below the surface, and we are now engaged in cutting through the south part of the lode, which is standing for 5 fms. high, it being too wide to carry for the width of the shaft, and I hope to reach the footwall in a few days, when we shall commence at once to drive both east and west on the course of the lode, and from present appearances I believe it will open out well.

MOLLAND.—T. Bennetts, July 23: During the past quarter our operations have been confined to driving the 32 and 20 fm. levels east, and stoping the back or bottom of both levels. The 32 east has been extended in the past quarter about 11½ fathoms through a lode varying from 6 inches to 2 feet wide, composed of quartz, white iron, and yellow copper ore, which produced of the latter saving work. Within the last 3 fathoms driving the lode has, however, become 2½ feet wide in the bottom, producing 1 ton of ore per fathom, and in the present end it is widening, and looks promising to produce more as we extend on it east. This end is now about 85 fathoms east of the shaft, and as the hill rises rapidly at this point I have no doubt we shall soon get a back here of 60 fathoms from surface. Six men are employed here, at 5*l.* 15s. per fathom. In the back of this level we have a new piece of orey ground about 15 fathoms long, where the lode wil produce on an average 1¼ ton of ore per fathom. We have stoped about 4½ fathoms of ground in this back, which produced 2 tons of ore per fathom, of pretty good quality, the ore being more in solid lumps, and less associated with white iron than formerly. The 20 east has been cleared and secured, and extended 9½ fms. during the past quarter; but we have met with nothing here of importance as yet. The first 4 fathoms or so produced a little saving work, when a slide was met with which disordered the lode. The slide has, however, been cut through, and several branches have been met with, and in the present end we have just met with a large branch, composed principally of quartz, with a few spots of ore, and which I am inclined to believe is the main part of the lode; however, a few days will suffice to prove this. The ground is congenial for copper ore deposits in this locality, and hence I am encouraged to believe that we shall meet with ore in extending this level, as well as at the 32 east; six men are employed here, at 5*l.* 10s. per fathom. In the bottom of this level we have stoped and sunk about 18½ fathoms during the past quarter, which produced on an average from 1½ to 2 tons of ore per fathom, and we have here yet to stope away a piece of ground about 9 fathoms long and 3 fathoms deep, which is producing 1½ ton of ore per fathom. Other parts of the level may do to make trials on, but nothing can be said with confidence or certainty respecting the results. However, we have a long piece of ground in the bottom of the 32, which is very orey in places, and will pay very well for taking away; and in the back of the 42 east we have orey ground, which will pay for taking away should the standard move up a little. The ground excavated in the past quarter by driving, stoping, and sinking is about 44 fathoms, which has produced on an average over 1¼ ton of ore per fathom. We have now about 60 tons of ore at surface, which will be all dressed and sent to Barnstaple to be stamped at the end of this week or the beginning of the next, if all be well, and which I estimate will produce 6½ per cent. of copper; besides, we have 8 or 10 tons of refuse ore, which may be dressed up at a future time. In conclusion, I beg to say that it is requisite and desirable to continue our present operations, and to resume operations at some of our deeper levels whenever an opportunity may present itself for doing so.

NANT-Y-IAGO.—J. P. Roach, July 23: The winze sinking under the adit level, east of engine-shaft, is about 3 fms. deep. At this point the lode is hard, chiefly composed of clay-slate, sulphur, blende, and solid stones of lead ore, but not sufficient quantity of the latter to value. I am daily expecting a change for the better. The rise in the 10, west of shaft, is 6 fms. 1 ft. above the level; at this point the men are driving east, to hole to the winze sunk below adit. We have about 6 ft. more to drive to effect a communication, which I expect will be accomplished some time this week; this done, it will give us every facility for stoping the back, and as well as to thoroughly ventilate this part of the mine. The lode in the deep adit level, east of cross-course, is 3 ft. wide, and during the past few days has produced some good specimens of lead ore. The end is now being wrought against a smooth head or joint dipping south, which has rather split up the lode, but I expect it will again improve, after the joint shall have been broken through.

NETHER HEARTH.—W. Vipond, July 20: We have the vein again in the end of the level, with nearly enough ore to pay cost. I think it would be best to leave this at present and place the men at the shaft while the favourable weather lasts; this might be tried on a little further in winter. We are working some good ore from the bottom of the cross-cut north, and it continues to go deeper. After getting through the hazle in Robinson's engine-shaft we had a few inches of whetstone, and are now down upon another hard hazle, which I think is very similar to the last.

NEW TRELEIGH.—F. Pryor, J. Prince, jun., July 24: Carr's engine-shaft is sunk 7 fms. below the 80; the lode in this shaft is large, and producing stones of ore, but not to value. The 80, east of shaft, has been disordered by a cross branch of spar, by which means the lode became poor; it will now produce 1½ ton of ore per fm., and from its present appearance will improve shortly. The rise in the back of this level is worth for copper ore 3 tons per fm.; when this is holed it will enable us to work the bottom of the 70. The 70 east, on Wheal Maria north lode, is small and poor. There is nothing new in either of the cross-cuts at the 70 and 80. Our tribute department is not looking so well as it was three months since.

NORTH BASSET.—T. Glanville, G. Davey, July 19: Tutwork Setting: The flat-rod shaft, to sink below the 142, by nine men, at 40*l.* per fm.; the lode in the 122 took a flat underlie, and went to the north of the shaft; it has again taken its regular course, and is now in the bottom of the shaft, where it is 2 feet wide, producing good stones of ore, and has a very promising appearance. The 142, to drive east of the flat-rod shaft, by four men, at 5*l.* 10s. per fm. The 132, to drive west of the cross-cut, by four men, at 10*l.* per fathom; the lode is 3 feet wide, worth 8*l.* per fm. for tin. The 122, to drive west of the eastern cross-cut, by four men, at 8*l.* 10s. per fm. The 102, to drive west of Lyle's shaft, by six men, at 20*l.* per fm. Grace's shaft to sink under the 92, by six men, at 20*l.* per fm.; the lode is 2 feet wide, composed of fluor-spar and good stones of ore. The 92, to drive east of Grace's shaft, by two men, at 5*l.* per fm. The 92, to drive west, by four men, at 6*l.* per fm. The 82, to drive west, by four men, at 12*l.* per fm.; the lode is 18 in. wide, producing 1 ton of ore per fm. The 82 cross-cut to drive south by four men, at 22*l.* per fm. The winze to sink under the 72, by four men, at 9*l.* per fm.

2 tons of ore per fathom.—Trial Shaft: In Will's cross-cut south, in the 42 east, No. 2 south lode is intersected, it is 2 feet wide, and promising, being composed of capel, mundic, and good stones of ore. In the cross-cut north, in the 30 west, a tin lode has been met with; it is 2 feet wide, and from which good stones of tin ore have been obtained, and its present appearances are very promising. We estimate to sample td-day about 150 tons of ore.

NORTH WREY.—T. Kemp, July 25: The new shaft is down 2 fms. 3 ft. below the 20; the ground is of the same character, and about the same for progress as last reported. The last three of four days we have had a full supply of water to work the wheel, and the water is in fork again at the old shaft. We shall push on the cross-cut towards, and to come under, the new shaft with all speed.

OLD TOLGUS UNITED.—W. Gilbert: In the 52 west, on the south lode, we have met with a part of a lode to the south, and it has given it a different direction; it will take a day or two to take down the lode to know its value again. By the appearance of the same it will still improve: it is 4 feet wide, and producing 2 tons of copper ore per fathom, worth 6*l*. per ton, or 12*l*. per fathom. Such a masterly lode as this cannot fail. It is letting out much water. The 42 west, on the same lode, is 2½ feet wide, producing stones of copper ore and tin, and letting out much water. The 32 west, on the same lode, is 9 in. wide, producing stones of copper ore, mundic, and blende, and rather improved since last reported on. These ends appear to improve as they near the great champion cross-course. The new south lode, in the 52 west, is much the same as last reported. We have commenced to dress the copper ore. Our machinery is in perfect order, and working well.

PEDN-AN-DREA.—W. Tregay, T. Delbridge, J. Thomas, July 20: The shaft being now ready for sinking below the 110 has been set to sink, and will be pushed towards another level as fast as possible. In the 110 east the lode is promising, and producing stones of tin. The 100 east is yielding coarse tinstuff, and improving. The stope in bottom of this level is worth 30*l*. per fm. We expect to get down upon the better tin ground between this and next setting. The 100 west is worth 9*l*. per fm. The 90 west is poor. In the 90 rise the lode is again improved, worth 20*l*. per fm. The 90 west, on Skimmer's lode, is worth 5*l*. per fm.—Street and Bragg's: The lode in the 47 east is improving in appearance, and producing fair quality tinstuff. The 40 east is worth 10*l*.

PENCRAIG UNITED.—R. Roberts, July 21: We still continue to cut the cross on the No. 2 shaft, and although we have not yet come upon the course of ore, we expect every day to do so. The quantity of water in the pools is about the same as usual.

PRIDEAUX WOOD.—F. Puckey, J. Puckey, July 22: The lode in Kendall's shaft, sinking below the 64, is 5 feet wide; the south part of the lode is producing some good work for tin; the lode is hard, and spare for sinking. In the 52, east of Kendall's shaft, the lode is 1½ ft. wide, and will yield 1 ton of copper ore per fm.; we have communicated the rise in the back of this level with the winze sinking below the 44, and commenced stoping the lode in the bottom of the 44. The lode in the stopes is 2 feet wide, and will yield 1½ ton of ore per fm. In the 34 west the lode is small, but looking more favourable for producing tin. In the 54 cross-cut south the ground is still favourable for driving. Our tribute pitches are much the same as last reported.

PROVIDENCE.—W. Hollow, jun., July 24: Higgs's Shaft: No. 3 carbona is worth 35*l*. per fm. No. 4 carbona is worth 20*l*. per fm. The stopes in bottom of the 75 east are worth 12*l*. per fm.—New South Lode: The lode in the 65 end is worth 40*l*. per fm. No. 1 stope in the bottom is worth 110*l*. per fm.; No. 2 stope in the bottom is worth 60*l*. per fm. There is no change to notice in any other part since last report. The following is an abstract of our settings on Friday last:—81 men on tribute, at an average of 8s. 4d. in 1*l*., and 70 men on tutwork. Our present samplings of tin are more than the average of the last twelve months, and our prospects are very good.

PROSPER UNITED.—W. H. Martin, July 25: We have resumed sinking on Murchison's lode. The shaft is down 9 fms. from surface, the lode in which is at present disordered a little by a slide. At Louisa's engine-shaft we have dropped the lift 20 fms. below the adit, and the water is drained 18 fathoms. The sumpmen are engaged cutting down the shaft, which is made good 12 fms. below the adit. At Hosking's engine-shaft the lift is dropped, and the water drained 15 fms. below the adit. The sumpmen here are likewise engaged cutting down the shaft. Both the pumping-engines are working remarkably well. The masons are making good progress with building the houses for the reception of the whim-engines; the one on Louisa's shaft is nearly ready to receive the roof. All the other operations are progressing favourably.

REDMOOR.—T. Taylor, July 22: During the past month we have driven the 40 west, on Johnson's lode, 4 fms. 4 ft. 9 in.; throughout this drivage we have broken some good saving work and spots of lead. I expected to have reached the cross-course ere now; its underlie cannot be so great as seen in the back of the 70; now set to four men, at 5*l*. per fathom. In the 70 west we have driven 3 fms. 5 ft.; in this drivage we intersected a beautiful cross-course; the lode east and west of this cross-course is about 3 ft. wide, containing a large quantity of wolfram and blende, intermixed with spar, and worth on an average about 9*l*. per fm. for tin; now set to four men, at 6*l*. We have driven the 80 end 2 fms. 4 ft. 3 in.; the lode throughout this drivage is worth about 9*l*. per fm. although in the present end it is not quite so good, being disordered by a capel; set to four men, at 7*l*. 10s. per fm.—Tribute: The 80 to four men, at 10s. 6d.; four men at 12s. The 70 to four men, at 12s. The 60 to four men, at 11s. in 1*l*. for tin. We are getting on with our dressing as fast as possible.

RIBDEN.—R. Niness, July 25: The stopes in bottom of the 62, at Gilbert's, are yielding good ore, and so are the stopes in back of this level. The lode at this time presents a very promising appearance, and likely to produce a large quantity of rich ore.

ROSEWARNE CONSOLS.—J. Richards, July 23: The shaftmen have been engaged casing and dividing the shaft, and will commence driving to-morrow. No alteration in Ellen's shaft; the water is very quick, and our progress slow. In the 20, driving east on the caunter, the lode is 2 ft. wide, with stones of ore. We have sunk a winze 4 fms. behind the end in the bottom of the 20, now down 6 ft.; lode 15 in. wide, worth 10*l*. per fathom; the water is very quick; we shall try to sink it a little further to prove the lode. We have sampled to-day 17 tons of copper ore of good quality. We have drawn up all the pitwork from Boorman's shaft, and shall place the whim on the flat-rod shaft on the caunter lode. We have one pare of tributers at work, and are likely to employ more at this point.

ROSEWARNE UNITED.—Henry Woolcock, July 25: In the 90, east of Jennings's shaft, the lode is 2½ ft. wide, opening tribute ground. In the 90, west of footway-shaft, the lode is 2 feet wide, at present unproductive. In the 80, east of Jennings's shaft, the lode is 2½ ft. wide, composed of killas, spar, and stones of copper ore. In the 80, west of footway-shaft, the lode is 2 ft. wide, impregnated with copper ore. In the 74, south of Richards's shaft, the men are cross-cutting south, in order to cut the lode; we calculate this will take about a month more to accomplish. In the 58 fm. level, west of Richards's shaft, the men are rising; lode large, composed of mundic, capel, spar, and ore. In the 46, east of Lane's shaft, the men are rising, in order to ventilate the same; lode 15 to 18 inches wide, with a promising appearance. In the 34, west of Bush shaft, the men are cutting north through the lode. In the 34, east of Lane's shaft, the lode is 2 feet wide, and producing some good work for tin, worth 3*l*. per fm. We sampled on Tuesday last 112 tons of good quality ore.

SORTRIDGE CONSOLS.—Jas. Richards, July 25: Hitchens's Engine-shaft: The 50 east, west of Collom's cross-cut, on the north part of the lode, is communicated with the old working, and the men put to rise in back thereof; the lode is worth 1 ton of ore per fathom. The 50 east, and east of Crew's cross-cut, on the south part of the lode, is suspended, and the men put to rise in the back, where the lode is worth ⅓ ton of ore per fathom. In the 40 east, and east of Head's rise, on the south part of the lode, the lode home to where last taken down is worth from 30*l*. to 40*l*. per fm. In a new rise (Lawrey's) in back of the 30 east, on No. 2 south lode, the lode is worth 1 ton of ore per fm. In the 20 west of the eastern shaft, and west of Arthur's cross-cut, on the south part of the lode, the lode is worth 1 ton of ore per fathom. We estimate to sample to-morrow about 70 tons of ore.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, July 20: The engine-shaft is about the same for progress as when last reported. In the 62 west we have been dessing the lode for the last week, and have not taken down any; we shall, however, take it down again the latter part of next week; by working in this way we can save the ore much better than if broken down with the granite as we proceed. We have not yet met with any lode or branch in the 47 cross-cut north, but it is my opinion that we shall soon do so, as there is water coming from different parts of the end, and the character of the granite appears to be changing. The winze in bottom of the 47, west of the cross-course, progresses pretty well, but I would advise putting two men more, in order to make greater dispatch.

SOUTH CONDURROW.—W. Thomas, July 22: The lode at the engine-shaft, sinking below the 30, is 2½ ft. wide, composed of gossan, spar, and mundic; set to six men and three boys, at 14*l*. per fm. In the 15 east the lode is 2 ft. wide, composed of gossan and spar. We shall drive this end with all possible dispatch, to get under the promising lode driven through in the adit; set to two men and two boys, at 2*l*. 15s. per fm. In the adit level west the lode is 2½ ft. wide, composed of peach, gossan, and a little tin; set to two men and two boys, at 5*l*. per fm. In the adit level, east of Thomas's shaft, the lode is 3 ft. wide, composed of gossan and peach; set to three men and three boys, at 4*l*. 4s. per fm. We have suspended driving the adit level on Wood's lode, and put the men to drive west on a lode which lies about 25 fms. south of the former, and which is immediately to the west of us in Tolcarne Mine, and is at present proving very productive for tin.

SOUTH CRENVER.—E. Chegwin, July 23: In the flat-rod shaft, sinking below the 105, the lode is 2 ft. wide, producing good stones of ore. In the 105 east the lode is 9 in. wide, producing stones of copper ore, but not to value.—South Mine: In the 51, east of cross-cut, the lode is 2½ ft. wide, producing stones of tin. In the 51, west of cross-cut, the lode is 3½ ft. wide, producing stones of tin, and spots of copper ore.

SOUTH DARREN.—J. Boundy, July 22: The engine-shaft is progressing most satisfactorily, and is now about 8 fms. below the 70; the ground continues favourable for sinking; the lode is 2½ ft. wide, containing clay-slate, copper, and lead ore, worth at present for copper and lead from 12 to 14 cwts. per fm. The lode at this point has a most promising appearance in depth. The 70 east I have suspended for the present. I have placed the men to stope in the back of the same, near the end, in order that a stull may be fixed there, after which the end will again be resumed, and pushed on by six men. The stopes in back of the 70, east of the shaft, are yielding 12 cwts. of lead ore per fm., with every prospect of improvement. The lode in the 60 east is 2½ ft. wide, containing clay-slate, carbonate of lime, and lead ore, worth fully 12 cwts. per fm., and presents a most favourable appearance. All the other points continue just the same as last reported. We have now plenty of water, and everything here is being pushed forward as fast as possible.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, July 24: The sinking of the shaft under adit, on the caunter lode, is progressing favourably (down 7 fms.); in it the lode continues 1½ ft. wide, producing stones of grey ore.

SOUTH WHEAL KITTY.—S. Mitchell, jun., July 23: Webb's engine-shaft is down and secured 8 fms. from surface; the lode is just the same as when last reported on; we have intersected a branch in the south part of the shaft, about 4 in. wide, worth from 2*l*. to 3*l*. per fm., underlying north, and will form a junction with the main lode in about 2 fms. deeper; this we consider a very kindly prospect, as we generally find lodes make very productive at the point of junction. The lode in the adit level is 12 in. wide, tinny throughout, and promises an early improvement.

ST. IVES WHEAL ALLEN.—H. Taylor, July 25: The lode in Roderick's engine-shaft is much the same as last reported. The lode in the 30, east of Giesler's shaft, is worth 20*l*. per fm. The lode in the winze sinking under the 50, east of Giesler's shaft, is worth 8*l*. per fm. The lode in the winze at the 50, west of Giesler's shaft, is worth 5*l*. per fm., and has every appearance of improving. The lode in the 40, west of Giesler's shaft, is disordered at present. Other places looking much the same as last reported.

TOLVADDEN.—F. Gundry, July 24: The ground in the 40, 60, and 67 ends is very favourable for driving. We intend to rise in the 50 to communicate with the 40 with all dispatch, for ventiliation, &c., during the week. Our prospects in the 67 cross-cut have improved. We shall resume sinking the engine-shaft immediately.

TREFULACK UNITED.—T. Hodge, July 17: The engine-shaft is below the 44 fm. level about 2 fms. We have 1 ft. more to sink for bearers and cistern. The lode in the 36 west is small and at present poor. The 36 cross-cut is driven south towards the caunter lode about 7 ft.; the ground is moderate. The 36 cross-cut, north of wheel shaft, is communicated to the north level. The men are now engaged clearing west on the north lode. The lode in the 36 east, on the north lode, is about 1 ft. wide, producing good stones of tin, and promising to improve. The Wood shaft is completed to the 26. In the 16 west, on the caunter lode, the lode is large, but of no value.

— J. Pope, July 24: I beg to inform you the engine-shaft is below the 44 about 13 ft.; we shall now commence to put in bearers, cistern, &c., and fix plunger-lift, which will take about three weeks to accomplish. We have cleared and secured the 36 west, on the north lode, to the end, and commenced to drive where the lode is at present small, but has a very promising appearance, from which some change for the better may be expected shortly. The 36 east is also cleared and secured, and commenced driving; the lode is 9 in. wide, producing good stones of tin. The 36 west, on the south lode, is at present disordered by a slide; here we expect to have the lode shortly, and have every reason to expect some good work for tin. We have commenced cross-cutting into the 36 south towards the caunter lode, and expect to cut the lode in about a month or six weeks from this time; we recommend that this cross-cut be continued further south than the caunter, as there are good chances of cutting other parallel lodes in that direction. In the 16 west, on the caunter lode, the lode is 1 ft. wide, at present unproductive. We have 10 fms. more to reach the bottom of the mine, when it is reported from the old workers to be a good lode of tin, but to sink the engine-shaft to that level, and drive to the lode, will take about six months to accomplish. Looking at the mine as far as can be at present seen, we hope to make returns of tin to assist in carrying on the work until we reach the bottom, when we have every reason to expect to be in a position to raise large quantities of tin.

TRELYON CONSOLS.—R. James, E. Pooley, July 24: The new shaft is about 10 fms. below the 30; here the lode is worth 24*l*. per fm., for length of shaft, 10 ft. The stopes throughout are yielding their usual quantity of tinstuff.

TREVENEN AND TREMENHEERE.—J. Webb, July 18: Since the report for the meeting of the adventurers, we have seen a little more of the bottom of the engine-shaft, and have found the lode equal to what it was then reported, worth 25*l*. per fm. The shaftmen have now got a bargain to complete the enlarging of the shaft and bringing down the skip-road to bottom, which we calculate will require, with making shaft-plat, nearly three weeks from this time, we shall then be in good order to draw away the stuff east and west of the shaft, to uncover the old workers' stopes where they left off. The 165 is being pushed west, also the 150 towards the whim shaft, which are important points, having much whole ground in that direction. We are getting nearly all our present sales of tin above the 140; there will be an increase of tin this month, and shall soon go on to increase rapidly. All the machinery is in good order, and the operations generally in a sound state.

— J. Webb, July 24: The engine-shaft is completed to bottom—that is, at a 176 fm. level, and the skip-road at work there; the shaftmen will be engaged for several days cutting ground for shaft-plat. The old workers had a very contracted space, only 3½ ft. wide. After room is made, we shall be in good order for drawing away the stuff, noticed before, now lying on the bottom stopes. The 165, 150, and the other places are without alteration since my last communication. Our last monthly sale of tin was 6 tons 6 cwts. 2 qrs., realising 373*l*. 15s. 1d.

TREVOOLE.—H. Stephens, J. Lean, July 25: Stephens's shaft is down to the 60. The men will square the ground and commence driving east and west in a day or two. The lode in the shaft is worth 30*l*. per fathom, and continues good going down. The lode in the 50 east is improving, and will at this time produce 3 tons of fair quality ore per fathom. Other parts of the mine are not looking so well as they have been for some time past.

TREWEATHA.—J. Scoble, July 23: We have completed the dividing and casing down the shaft from the 15 to the 30, fixed ladder-road, &c. The men are now cutting top plat. We have met with a change of ground in the 15 south, which has disordered the lode, and, in consequence, it is not so productive as when in the elvan course, now worth 3 cwts. of lead per fm. There is another elvan course a little way ahead, in which I hope, when met, with the lode will be as productive as heretofore. We have extended out our dressing-floors a little, and are in course of dressing, the work turning out very well.

TRUMPET UNITED.—G. R. Odgers, July 20: In the engine-shaft, sinking below the 15, the mundic is wearing out, and under it the lode is yielding good work for tin, worth 3s. per sack, or about 5 cwts. of black tin per 100 sacks. All the other bargains are progressing satisfactorily, but without any change.

UNITED MINES (Tavistock).—J. Tucker, July 24: The engine-shaft is 8 fathoms below the 60; the ground at present is intermixed with spar, which is likely to impede our progress in sinking a little: I believe, however, that a cleaner floor of killas now coming in from the north will cut it all out of the shaft ere another 6 ft. is sunk. The south lode, in the 60 end east, is 2 ft. wide, of a most promising appearance, and letting out much water, but as yet is of no value; the lode in the western end of the same level maintains its width and kindly appearance, but is very poor. The north lode, in the winze, is in a rather disordered state; however, there are reasons to believe that the falling off is only temporary, as there appears to be a better floor forming below; the south lode is about the same as last reported, a good tinny, paying lode. We have had some heavy rain within the last two or three days, which enables us to stamp with eight heads.

VALE OF TOWY.—Arthur Waters, T. Harvey, July 23: Clay's engine-shaft is now 2 fms. 3 ft. below the 100 fm. level; the lode in the present bottom is more compact and of better character than for some time past, and the country about it highly mineralised. In the 100, driving south of the said shaft, and south of the great cross-course, the lode is 10 ft. wide, composed of carbonate of lime, blende, and lead ore, with patches of rock throughout, a sample from which will be forwarded to you by this post: we have let 6 fms. here at 30s. per fathom, and from the fact of our having already the water up to Field's shaft we calculate that there is a long run of soft porous ground before us. In the 90, driving south of the latter shaft, the lode is in two parts; the main course, which is against the hanging wall, being about 18 in. wide, and opening tribute ground. The sinking of this shaft below the 80 has been retarded by water, but this hindrance is now removed, and the men will square the ground, and have the shaft through by the end of the present week. In the 80, driving north of Clay's shaft, the lode is from 5 to 6 feet wide, yielding occasional stones of lead ore. In the adit level, driving south of Nant's shaft, we have a large gossany lode of a loose character, and yielding stones of lead ore; this end is letting out a strong feed of water. Our tribute pitches throughout the mine are yielding fair quantities of lead ore. On Saturday next we shall sample 52 tons of the usual quality lead ore. All our machinery is in good order, and working well. The dressing cost payable on Saturday next amounts to 19*l*. 14s. 3d.—P.S. The sample referred to was broken from the end by us to-day; you can see it best by washing it in a saucer.

WENTNOR (Pantasa).—T. Pierce, July 22: We are coming to very good ore at the Pantasa Mine, so much so, that if it but continue as it is at present it will raise the price into pounds instead of shillings. The new shaft is going on well.

WEST DEVON CONSOLS.—G. Rowe, July 24: The 40 is in regular course of driving by a full pare of men, and the lode is laid open some short distance east from engine-shaft; it is showing a very kindly appearance, and increases in size every foot we drive, carrying a leader of mundic and rich yellow copper ore 9 inches wide; the stratum in which the lode is embedded is of a splendid description, and, judging from present appearances, I am inclined to think it will yield very satisiactory results. On Friday next we hope to effect our first sampling at Calstock Quay, which, if the weather continues fine, will be upwards of 30 tons of copper ore. All the works are progressing favourably.

WEST PAR.—J. Webb, July 25: The shaftmen have been timbering up the shaft the last few days; the shaft is now in good order for sinking. The adit is being driven on favourably north of the new shaft, by two men.

WEST PROVIDENCE.—J. Thomas, July 26: In the upper levels the tribute pitches are producing tin from 2½ to 4 cwts. per 100 sacks. The 60 fm. level is driving by six men, at 6*l*. per fm., end poor; I think will be only temporary, being crossed by crossings. In the 100 two men are driving west at 90s. per fm., end poor. Four men driving east at 100s. per fm.; the branch is worth 100s. per fm. for tin and copper. The 110 is driving west at 230s. per fm.; the branch is producing good work for tin, and the ground is looking better, and letting out much water. In the 120 six men are driving west at 160s. per fm.; the end is divided, but poor, and letting out much water, two men are stoping the bottom for copper, at 12s. in 1*l*. In the 130 six men are driving west at 90s. per fm.; the lode is 1 ft. wide, containing a little copper, two men are stoping in the back at 12s. in 1*l*. St. Aubyn's shaft, sinking 9 ft. below the 100, is set at 160s. per fm.; the lode is disordered by an elvan course, producing saving work for tin.

WEST SHARP TOR.—William Richards, July 22: The cross-cut in the 150 is now extended into the lode 29 ft. 6 in., and there are no symptoms of being through it as yet: the part now being cut into looks more promising, containing a little more grey copper ore, and softer quartz, with iron, peach, capel, and prian. Morris's engine-shaft is now 8 fms. below the 150, and I have pleasure in stating that the ground in the present bottom is equally favourable for progress.

WEST WENDRON CONSOLS.—July 20: The engine-shaft is sunk 3 fms. below the adit; lode 12 in. wide, yielding a little tin. The flat-rod shaft is sunk 8 ft. below the adit; the ground good for sinking; set at 70s. per fm.; this shaft we expect will take the lode about 11 or 12 fms. below the adit. The ground in the cross-cut behind the smiths' shop is much the same as last week. The adit driving north from the south part of the mine is about 4 fms. from the lode.

WEST WHEAL MARGARET.—W. White, July 23: There has been no change either in Hallet's shaft or in any other part of the mine since last reported.

WEST WHEAL TOLGUS.—July 24: South Lode: The men are making good progress in cutting down Taylor's engine-shaft. The lode in the 65, west of Wheal Raven engine-shaft, is 2½ feet wide, composed of soft spar, prian, and peach, producing occasionally good stones of stone—a very kindly lode.—North Lode: The lode in the 50 end, west of Wheal Raven engine-shaft, is 2 feet wide, composed of peach, jack, mundic, and spar. The lode in the 40 end, west of Wheal Raven engine-shaft, is 2½ ft. wide, looking better than when last reported on, now yielding 1 ton of ore per fathom, and is promising for further improvement. The ground in the 65, 50, and 30 fm. level cross-cuts north is moderately easy; no lode has been met with in either since last reported.

WHEAL ANNE.—J. Stevens, July 17: There are four lodes opened upon in the adit level. The north lode has been driven on 16 fms.: lode 3 ft. wide, producing good work for tin. The Plexey lode has been driven on 17½ fms.; lode 3½ ft. wide, worth 5*l*. per fathom. The little north lode has been driven on 4 fms.: lode 2 ft. wide, producing good work for tin. Allen's lode has been intersected by a cross-cut in the deep adit level; lode 13 ft. wide, good work for tin. If this lode maintain its size and quality, there is every probability that this will shortly become a dividend-paying mine, as the ground is very easy for exploring; average price for driving from 20s. to 30s. per fm. I think the new stamps will be working by Aug. 12, when you will soon get a good batch of tin in the market. In conclusion, Capt. Grose has used every economy in his operations.

— H. B. Grose, July 25: I beg to inform you we have again to-day taken down a piece of Allen's lode in the shallow adit, 12 fathoms below the surface, which is 9 feet wide, good work for tin, and very speedy for taking away. I consider six men stoping and two men driving on this lode will keep our stamps with 12 heads constantly going, and if the lode maintains its present value will pay the cost of the mine and leave good profits. The rise in back of the deep adit is progressing satisfaciorily; lode 2 feet wide, saving work for tin. The carpenters are making good progress in putting the wheel together, which I expect will be completed by Saturday; after which we shall be getting on with putting the stamps together, which we hope to complete in about a fortnight. After that time the cost of working will be greatly reduced at the surface, as we have all our water-courses to and from the wheel complete, and all other surface works in a forward state of being completed. We have all our castings on the mine for the stamps, and no time will be lost in getting it to work to make returns, which I have no doubt from the present prospects of the mine will prove satisfactory.

WHEAL ARTHUR.—T. Carpenter, July 23: Old Lode: Hooper's rise, in back of the adit west, is up 8 fms., and we have 3 fms. more to rise to reach the bottom of the 50, which I hope will be accomplished in about 14 days from this time. The lode in the 50 east is very much improved this last few days past; it is now 2 ft. wide, yielding good stones of copper ore. We have 3½ fms. more to drive this level east to get in over Hooper's rise, when the mine will be well ventilated. The lode in Burley's stope, in back of the adit west, is 3 ft. wide, yielding 1½ ton of copper ore per fm. The lode in Palmer's stope, in back of the adit west, is 2 ft. wide, composed of spar and peach, worth of the latter 1 ton per fathom.

WHEAL CONCORD.—H. Luke, July 21: We have forked the water out of the 38, which will enable us to commence driving the cross-cut south, as proposed. The lode is improving fast; we have solid stones of lead from 15 to 20 lbs. weight, and every indication of a course of lead under our feet.

— H. Luke, July 24: There is an improvement in the lode in the 10 east, producing some very good stones of lead; we have put two men men and two boys in this end. We have also some good stones at the bottom of the level, and every appearance of a piece of lead under us. We hope shortly to sink in the bottom of the level, and prove the sort of course that may be there.

WHEAL CREBOR.—J. Gifford, July 23: Saturday last being our setting-day, the following bargains were set:—The 60 west, on south lode, by six men, at 5*l*. 5s. per fm., stented 3 fms.; no alteration in the lode since last report. The 60 east by six men, at 3*l*. 10s. per fm., stented 4 fms.; lode in present end 2 ft. wide, yielding good stones of copper ore. I intend taking four men out of this end to-morrow, and put them to rise in back of the 60 east, to prove the shoot of ore in bottom of the 48, where I expect to cut out some good tribute ground. The 48 cross-cut north, east of Cock's shaft, by two men, at 3*l*. 10s. per fm., stented 1 fm. The 48 west by six men, at 8*l*. per fm. There is a good lode both in back and bottom of this level, but in the present end the lode is small, about 8 inches wide, saving work; the last 4 ft. of the lode taken down yielded 1½ ton of copper ore, worth 5*l*. per ton. The water is still decreasing in the 34. In the old mine, from present appearances, I hope to drain the water from the old workings before we communicate the 48 with it.

WHEAL CUPID.—R. Pryor, sen., July 20: The lode in the 40, east of the engine-shaft, is 3 ft. wide, producing stones of ore. The lode in the 54 rise is 2½ ft. wide, composed principally of a fine looking gossan, with occasional stones of ore. I am daily expecting to hole this rise to the 40. There is not much being done in the 54, east of shaft, during the past week, for want of air.

WHEAL DAMSEL.—R. Pryor, sen., H. Harvey, July 19: Setting Report: The 40 fm. level cross-cut to drive south of King's shaft by six men, at 3*l*. 10s. per fm.; we have not made so much progress in this cross-cut as we expected, in consequence of coming into contract with several small branches of spar, which made the ground very troublesome for driving, but now we are glad to say it has become more favourable. The 50 fm. cross-cut to clear south of the engine-shaft by three men and three boys, at 16s. per fm. The 30 to clear east and south of Foxe's shaft by two men and two boys, at 8s. per fm. We have succeeded in getting into Gilbert's lode from Tremayne's shaft, and find a large piece of ground standing to the east of Hodge's flookan; after this level is cleared to this joint we should recommend the driving of the same east on this lode, which is of a promising character. The engine and rods are working well.

WHEAL EMMA.—R. Dunstan, July 20: There is an improvement in the 58 fathom level; the lode in the east is now worth about 2½ tons per fm. Other points just the same as when I last wrote.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 20: There has been no lode taken down in the engine-shaft this week. The lode in the 100 east is 18 in. wide, producing occasionally good ore; during the last 6 ft. driving we have discovered a very large stream of water flowing from the south side, almost indicating that there is more lode standing, which we intend to prove forthwith. The rise above the 100 west is opening tribute ground. The lode in the rise above the 90 west is opening tribute ground. The lode in the winze sinking below the 90 west is 1 ft. wide, and worth about 1 ton per fathom. The tribute pitches are producing about the same quantity of ore. All the other bargains are progressing satisfactorily, but without any change calling for remark.

WHEAL GRYLLS.—E. Rogers, J. Pope, July 25: Fisher's Lode: In the 20, west of Annie's engine-shaft, the lode is split in two parts, producing stones of tin and copper ore; in this level east we are not yet through the slide. In the winze in bottom of the 10 there is no alteration, the lode is worth 7*l*. per fm. The flat-rod shaft is down 6 fms. 3 feet below the 10, we are glad to say we have got through the elvan course, and the ground is more favourable for sinking. In the 10, east of this shaft, the lode is worth 5*l*. per fm. In the end, east of Grylls shaft, the lode is worth 3*l*. per fm.—Mill Pool Standard Lode: The western shaft is down to the 40, and we have commenced to drive west; the lode in the end and shaft is small and unproductive. The stopes in the backs of the 30 and the 35 are just the same as when last reported on.—Georgia Lode: In the winze in the bottom of the 33 there has been no lode taken down for the week. In the stope in the back of the 33 the lode is worth 15*l*. per fm. In the deep adit level we are cross-cutting south, and expect to cut the Georgia lode the latter part of next week. We sold on the 18th inst., to the Trereiffe Smelting Company, 2 tons 4 cwts. 1 qr. 9 lbs. of tinstone, at 52*l*. 2s. 6d. per ton.

WHEAL HARRIETT.—S. Williams, July 20: The lode in the 115 is 1½ ft. wide, producing stones of tin and copper ore. The lode in the stope below the 100 is not producing tin to my expectation; we are now at the junction of the two lodes, or the cropping of them; at this point they are small, but I have no doubt as they separate from each other they will again improve, as they have done in the 100 east end, where the lode is worth 5 cwts. of tin to the fathom. The lode in the stope above the 100 is worth for copper and tin 15*l*. per fm. The pitch working below the 74 is improving, and the men are getting good wages. The lode in the stope above the deep adit level is worth 7*l*. per fathom.

WHEAL HOPE.—Wm. H. Reynolds, July 20: We have started the engine, and it works admirably. We hope to make good progress in forking, and soon to be able to set pitches on the old lode, as well as to cross-cut to the wheel-pit lode.

WHEAL KITTY (St. Agnes).—R. Pryor, sen., J. Nicholas, W. Higgins, July 20: The 110 to drive west of engine-shaft by six men, at 13*l*. 10s. per fm. The 100 to drive west of ditto by two men, at 8*l*. per fm. The 100 to drive east of ditto by three men and three boys, at 9*l*. 10s. per fm.; the rise in the back of this level by two men and two boys, at 8*l*. per fm. The 90 to drive east of ditto by three men and three boys, at 6*l*. 10s. per fm. The 82 to drive east of ditto by three men and three boys, at 7*l*. per fm. The 72 to drive east of ditto by four men, at 7*l*. 10s. per fm.; the rise in the back of this level by four men, at 9*l*. 10s. per fm. Holgate's shaft to sink below the 100 by six men, at 7*l*. to 8*l*. per fm. The 100 to drive west of this shaft by two men and two boys, at 9*l*. 10s. per fm. The 82 to drive west of ditto by two men and two boys, at 14*l*. per fm.; the rise in the back of this level by four men, at 11*l*. per fm. The 54 to drive west of ditto by four men, at 8*l*. per fm.; the winze to sink below this level by four men, at 9*l*. 10s. per fm.; the rise in the back of the 44 by four men, at 9*l*. per fm. We will send on a detailed report on the present position and prospects of this mine against the general meeting of the adventurers, which, we believe, will be satisfactory.

WHEAL MARGERY.—R. James, J. Benbow, W. Rogers, July 24: At Wellesley's engine-shaft, sinking below the 90, the lode is 2 feet wide, producing ore throughout of low quality. In the 90 west the lode is 18 in. wide, of kindly appearance, and in driving another 5 fathoms will reach the ore ground driven through in the 80 fm. level. In the 90 east the lode produces more ore than in the level over; we have laid open three pitches, working at 10s. in 1*l*., and in two or three months from this time we shall communicate with the 90, west of American shaft. No. 1 winze, in the bottom, is worth 10*l*. per fathom, and the lode in the 100, under this place, is worth 20*l*. per fathom. The 70 west, driving under the tin lode, is still poor. At the American shaft, sinking below the 100, the lode has an improving appearance, producing ore of superior quality, and will be to the 110 in a fortnight. In the 100 east the lode is much wider than we have ever seen it before, and letting out more water; as we are getting nearly under the ore ground driven through in the level above, we are daily expecting an improvement here. In the 90 east the lode is rather confused at present, but here we have a very good run of ore for a great length; the nearest pitch to the end is working at 2s. in 1*l*. No. 1 winze, sinking below this level, east of shaft, is worth 10*l*. per fathom.—Highburrow: We cannot report anything new in this part of the mine. The returns of tin are about the same as for some time past. The tribute throughout is rather improved, and from present appearance our next sampling will be quite equal, or better, than the last.

WHEAL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, July 24: The lode in the 170, north of Pollard's shaft, is 2 feet wide, and worth 4*l*. per fathom; in the same level south it is 2½ feet wide, and worth 6*l*. per fathom. In the 160 north fit is 2 feet wide, and worth 4*l*. per fathom; in the same level south it is 3 feet wide, and worth 7*l*. per fathom. The 150 north is at present unproductive; in the same level, south of Clymo's shaft, it is 4 feet wide, and worth 8*l*. per fathom. There is nothing new in the 110, south of the slide. Clymo's shaftmen are still engaged in cutting a trip-plat in the 160. The stopes and pitches are producing much the same as they have for some time past. We sold on July 23 two parcels of lead ores. No. 1 (computed 70 tons), to T. Somers at 25*l*. 4s. 6d. per ton; and No. 2 (computed 70 tons), to Messrs. Sims, Willyams, and Co., at 8*l*. 5s. 6d. per ton.

WHEAL MARY EMMA.—Capt. Doble, July 24: Since last two-monthly meeting operations have been chiefly confined to sinking the Emma engine-shaft, which is now down about 5 fms. In the past month the water has been very quick, too much to sink with barrels; and, having a good 40 feet diameter wheel in, as well as a 12 fm. lift of 6-in. pumps on the mine, I should advise putting in the necessary work for pumping. I believe this can be done for about 15*l*., having 13 fms. in length laid open, producing tin the greatest part of that length to warrant doing the same. I beg to refer you to the report of Capt. Daw and others on the prospects of its making a good mine if laid open by sinking the shafts and driving the levels. To do this it is needful that the above-named shaft be sunk, and the water taken off by attaching the wheel, manual labour being too expensive. In the past week the water has been too much in the shaft. The men have taken out a bob-pit, and in doing so have laid open the south part of the lode, which is producing good stones of tin. It appears that this part of the lode will come into the shaft in sinking about 3 fathoms deeper, when it will form a junction with the part now sinking on, and, according to the general results of junctions, we may reasonably expect a good lode in sinking the shaft. In the past week I have also had the men opening a pit on the back of the lode by a large cross-course, where, by every appearance, there is a good lode of tin. Whether we shall succeed in time for the meeting I do not know; the heavy rains retard our work. If we can get down to see the lode before the meeting I will advise you. In conclusion, I must remind you that if you intend to work this mine it is needful to do the work recommended as soon as possible.

WHEAL MOYLE.—July 24: The men are getting on very well in cutting down Michell's shaft, and in two months, should this ground continue, it will be completed. The 20 fm. level stopes in the back of the 12 are quite as good as last reported. We have sold this month 6 tons of tin, and I hope we shall now bring everything in good working order to be able to continue that quantity monthly, and from 40 to 50 tons of burnt leavings, or low-price copper ores.

WHEAL NORRIS.—J. Nance, J. Andrews, July 20: The ground in the 15 cross-cut, driving north and south of the Cremorne shaft, continues much the same as last reported. We have let Carter's shaft to sink to the 15, or 4 fathoms deeper, at 26*l*. per fathom, and the takers are under an engagement to work on Saturdays until ten o'clock at night, and begin again on Monday mornings at one o'clock, or forfeit 10s. for each neglect; and should they complete their contract in two months they are to be allowed a premium of 30s. The north cross-cut adit, driving on the great cross-course, and the 15 fm. level, driving west of the flat-rod shaft, are progressing very satisfactorily, and we hope to make the communication in about three weeks; and when this is effected it will ventilate the eastern part of the mine, and enable us to explore this part without inconvenience from bad air. We have not yet cleared the sink in the bottom of the adit on No. 3 lode, but hope to complete it in the course of next week. The No. 1 back stope, on said lode, is now within 4 fathoms of the surface, and we cannot calculate on getting much more tinstuff above this point. There is a great deal of ground on the No. 2 stope, but it is coarse in quality; so you will perceive that it is time for us to turn our attention to the tin ground below the sole of the adit level. The end, driving west of flat-rod shaft, is at present poor; but the lode in the back stope behind the said end is 2½ feet wide, of fair quality tinstuff. The lode in the east end is split into three branches, each containing good quality tinstuff. In extending the cross-cut south of No. 5 lode we have intersected No. 6 lode, at a distance of 3 fms. beyond the No. 5 lode; it is about 2 feet wide, composed of quartz and oxide of iron. In driving east on the lode recently cut in the north cross-cut from Carter's shaft, we have not yet got beyond the influence of the cross-course.

WHEAL POLLARD.—W. C. Cock, July 23: We have cut a l

The lode agrees with East Carn Brea as to strata, &c. The eastern end is from 12 to 15 in. wide, composed of spar, peach, mundic, and copper ore of rich quality, worth 6*l.* per fm., and laying open good tribute ground. The lode in the western end is also composed of peach and rich copper ore.—July 23: The lode to-day in the eastern end is improved. The quantity of tin sold for the last four weeks is nearly 14 tons, and there being a good supply of tinstuff the quantity will still increase at the present produce.

WHEAL UNITY CONSOLS.—W. H. Reynolds, July 29: We are pushing on the 75 cross-cut north as fast as possible. The end is in elvan, with branches of mundic, spar, &c.; the whole of the ground appears to be tinctured green, and we fully expect to cut a good bunch of ore before long. The other parts of the mine are just as last reported. We shall sample on Tuesday, and think we shall have full 50 tons of ore.

WORVAS DOWNS.—R. Harry, July 23: The general appearance of the mine continues much the same as last reported. The tribute pitches throughout the mine are looking favourable, and the men getting fair wages in their respective tributes. The engine and pitwork are in good order, and working well.

YARNER.—R. Barkell, July 24: South Lode: The 30 east is still poor; the ground is favourable for driving. The 30 west is looking better, and is very promising for further improvement; the ore is of good quality; the same remark will apply to the 20 west. The both winzes sinking below the 20 are looking well; the western will produce 2 tons per fm.; the eastern is worth fully 3 tons per fm. The 30 east, on north lode, is not improved since last reported on; the lode is 2 ft. wide, with spots of ore, and two good walls. At present we have surface water enough for all our purposes, and we are making the best use of it we can.

MINERAL WEALTH OF SOUTH WALES—No. III.

THE MERLIN HILL AND PANTYGLEIEN MINES.

We delayed the continuation of our remarks on the Merlin Hill and Pantygleien Mines in the expectation of being able to see the newly-cut lode at Pantygleien, that the company might derive all the advantages arising from a faithful description of it; but we have failed to do so, owing to the suspension of the works. When writing the second article we did not anticipate so early a crisis as that which has occurred, and which we hoped to divert by honestly setting forth the real condition of these mines. It has, however, come in the unwelcome form of an empty exchequer, an embarrassed directory, dissatisfied shareholders, and half-developed mines. These facts have been declared at two meetings of the shareholders, recently held in the company's office at Carmarthen. We do not think it advisable to enter into the details of these meetings; it is enough for us to state that the proceedings bear out the observations and comments to the very letter, and show that the system of misrepresentation did not stop where we had supposed. The first subject considered was the state of the company, and this could not be ascertained without a balance-sheet, which was laid before the shareholders; and, although imperfectly prepared, it disclosed the fact that after all existing liabilities were met there would be no assets. It is not very clear how matters stand, but we have it now on undoubted authority that the capital stock of the company (4000*l.*, in 4000 shares) had not been subscribed, notwithstanding the frequent representations of more than one of the directors and a conspicuous paid promoter that all the shares were taken, and by special favour only a few were reserved for allotment. When we said the capital was paid up, we did so upon the word of two directors, whose names, were it necessary, we would give; and, further, we know this manœuvre was the favoured instrument in getting rid of several shares. The accounts, which we presume do not prevaricate, exhibit a different state of things. We learn from them that about 1600*l.* only have been subscribed, and from this amount certain deductions are to be made. As the balance-sheet has not been published (in accordance with the 58th article in the Articles of Association) we are not in a position to examine them, but we are justified in concluding that barely more than one-third of the capital has been paid in cash, and that every effort to dispose of shares beyond that amount has signally failed. The question, then, for the shareholders was, what they were to do in the emergency? And, after a brusque and animated discussion, it was determined henceforth to observe the strictest economy; all salaries were summarily cut off, and a committee was nominated to wait upon those shareholders who have taken a lasting interest in the mines, for the purpose of inducing them to purchase additional stock, to make one effort more before finally winding the affair up.

But, why should the company be reduced to these straits? They began with every prospect of success, the lodes were of a promising character, particularly at Pantygleien, the directors had unbounded faith in the work, and there was a strong disposition in the district to give them substantial support; yet, they have not succeeded. We should be sorry for these mines to be transferred into fresh hands; those who took the first step should participate in whatever profits might arise; indeed, that has prompted us to express ourselves so freely, and to ask why the company should not rid themselves of the difficulties which trouble them? They have now to some extent entered upon a right course in lopping off the branches which uselessly consumed the life of the tree, and, also, in trying to sell additional shares to those who have already speculated. But here our commendation is arrested, for we consider it little better than throwing money away to drive on the Pantygleien lode at the depth of 10 fathoms, which we are informed it is proposed to do at once. We state this advisedly; the object of the company is to break ore, not to satisfy the sceptical that the lode is true; and, although not impossible, it is improbable that either lead or copper will be found by driving upon the plane of the shaft adit. Why not go deeper without further delay? Capt. Harper would soon discover it to be the cheapest and most effectual test, and with a little planning would not find the water too formidable for handwork, at least until the back of the metal is reached, as there is every chance of cutting it at no great depth. This gives us an opportunity of referring to the letter of a correspondent (which appears in another column) respecting the part Capt. Harper bears in the responsible management of these mines. In discussing the subject we carefully abstained from fixing any individual with blame: we spoke only of what had been done by the company and their advisers collectively, and we challenge contradiction upon any one of our statements. We will, however, admit that Captain Harper was desirous of testing the lodes in the cheapest manner, and was probably influenced against his own judgment. We readily afford him the full and unqualified benefit of our correspondent's vindication.

We now come to the Merlin Hill Mine, at which the workings are extremely simple. The master lode, running east and west, was opened by an adit some years since, at the sole expense of Mr. Gardner, the proprietor, whose enterprise and perseverance cannot be too highly spoken of. Capt. Matthew Francis, in his report of September, 1859, says this adit "is well selected," a proposition from which we widely differ, and we think the captain agrees with us when we take the whole of his report, for in almost the next line we find "neither the rock nor the vein stone is sufficiently consolidated at this depth to permit the formation of large ore deposits;" and, again, speaking of a new level it was proposed to drive, he writes "this will make a more advantageous trial," and "the upper adit was not low enough to catch the back of the metal." What, then, becomes of the assertion "the site of the adit is well selected?" Besides, it has proved itself useless in developing the mine, and is accordingly abandoned. It ought never to have been made, and when first suggested Mr. Gardner was cautioned by an intelligent miner of large experience, who plainly saw it was not deep enough to touch the ore. We feel bound to make these remarks, because in the articles of agreement it is arranged that "650*l.* is to be paid Mr. Gardner as compensation for work done and moneys laid out in respect of the Merlin Hill Mines"—in fact, for cutting the adit in question. We have inspected the lode at Merlin, and found it of considerable width and well formed, although of a different character to that at Pantygleien; it is composed of fine gossan and flookan, quartz, sulphate of barytes, and clay-slate: at about 50 fms. from the mouth of the level it is intercepted by a north and south vein of a similar description.

For some time after the works were carried on by the present company, this driving was pushed on against the ordinary probabilities of success. However, it was at last abandoned in favour of the deeper adit, and when Capt. Matthew Francis reported upon the mine, in September last, he says he has reconsidered the chances of the adventure, and concludes that there is a great body of lead towards the centre of Merlin's Hill. This, he continues, is declared by the nature of the veins, the abundant deposit of carbonate of lime in all the joints of the rock, and the fine deposit of flookan attending the lode; but the upper adit was not low enough to catch the back of the metal. "I think," to use the exact words of the report, "you will be able to reach it by means of your contemplated deep adit, about the judiciousness of driving which I quite concur with your local advisers. I examined the site for its mouth, near a nice stream of water of a volume of 500 gallons per minute, with a run of 1 in 30, capable of driving any necessary machinery wanted for mining your sett. There are two divisions of flookan in the brook, indicating the line of the lode, and on the course of the level your agents have wisely uncovered the surface of the vein, which exhibits a mass of metallic clay, such as is found covering metallic formations worth hundreds of thousands of pounds in the lodes of Cardiganshire." Our space will not admit of any comment upon this report, and we can only now state that the adit was shortly afterwards commenced, and was in process of driving when the works were suspended, a fortnight since.

SUBSTITUTE FOR GOLD—"OREIDE."—This alloy, which, as it will be recollected, excited some considerable attention in France a few years since, is now being largely manufactured in the United States. The alloy consists of—Pure copper, 100 parts; zinc, or, by preference, tin, 17 parts; magnesia, 9 parts; sal-ammoniac, 3·6 parts; quick lime, 1·8 parts; and tartar of commerce, 9 parts, which are thus mixed:—The copper is first melted, when the magnesia, sal-ammoniac, lime, and tartar, in powder, are added little by little; the crucible is now briskly stirred for half an hour, so as to mix thoroughly, and then the zinc is added in small grains by throwing it on the surface, and stirring it until it is entirely fused; the crucible is then covered, and the fusion maintained for about 35 minutes. The surface is then skimmed, and the allow is ready for casting. The fineness of grain in this alloy gives to those objects of art composed of it a delicacy and a purity of detail that can not be obtained from bronze. The alloy is scarcely distinguishable from gold, and is so malleable and ductile that it can be wrought almost in the same way.

MUSHET'S TITANIC PROCESS OF MANUFACTURING IRON AND STEEL.—Several more of Mr. Mushet's patents for the treatment of the Taranaki iron-sand and similar ores of iron have just been printed. In last week's Journal we described his process for bituminising the sand; since the completion of which patent he has specified an improved mode of treating ilmenite, another titaniferous iron ore; some improvements upon his former methods of alloying titanium with steel or malleable iron; and a process for improving metal refined by the pneumatic process, by adding to such metal some molten titanic alloy.

UTILISING INFERIOR IRONSTONE.—Mr. Wm. Pask, of Lydney, Gloucestershire, has procured a very valuable colouring matter from ironstone of so inferior a character as usually to be thrown aside as worthless, both in the manufacture of iron and of colouring matter.

PREVENTING EXPLOSIONS OF STEAM-BOILERS.—Messrs. Higginbotham and Beech, of Macclesfield, provisionally specified some improvements in machinery or apparatus, for the prevention of explosions of steam-boilers arising through deficiency of water or over-pressure of steam. The improvements consist in the novel application and use of a valve for that purpose, which is suitably enclosed in a chamber below the water line, and either inside or outside of the boiler the valve is connected to a lever passing into the boiler, in such a manner that the valve cannot open until the long end of the lever rises, such level being furnished with an adjustable weight, which regulates the valve to a slight degree beyond the ordinary working pressure of the boiler. Inside the boiler another lever is arranged, turning upon a fulcrum, and upon one end a float is attached, which rises and falls with the level of the water. The fall of the float opens the valve, and lets the water on to the fire.

*** We shall next week give a SUPPLEMENTAL SHEET, when several papers, now unavoidably omitted, will be published—including, the "Thick Coal Mining of South Staffordshire," by Mr. Henry Johnson, of Dudley—"Ancient Geology"—"The Iron Fields of Kent and Sussex"—and various papers now necessarily omitted.

*** With the Journal of June 8 a SUPPLEMENTAL SHEET was given, which contained—Loss of Life in Mines—Mining in Wales—Mining in Scotland—Metallurgy of Silver and Lead—The Origin of Mineral Veins—The Past and Present Life of the Globe—Geological Map of the Frongoch District, Cardiganshire—Ancient Geology—Mineral Oils of America and Canada—Mineral Coal—Iron and Iron-Making.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, July 26, 1861.

COPPER.	£	s.	d.	
Best selected....p. ton	96	0	0-	—
Tough cake..... „	93	0	0-	—
Tile ..... „	93	0	0-	—
Burra Burra (nom.)„	93	0	0-	—
Copiapo ..... „	86	0	0-88	0 0
Copper wire .....p. lb.	0	1	0	—
ditto tubes ..... „	0	1	0½	—
Sheathing & bolts .. „	0	0	10¾	—
Bottoms ..... „	0	0	11½	—
Old (Exchange) .... „	0	0	9	—

IRON.	Per Ton.			
Bars, Welsh, in London..	6	7	6-	—
Ditto, to arrive	5	17	6-	—
Nail rods	7	0	0-	—
„ Stafford. in London	7	0	0-	—
Bars ditto	7	10	0-	8 0 0
Hoops ditto	8	10	0-	—
Sheets, single	9	0	0-	9 10 0
Pig, No. 1, in Wales ..	3	0	0-	4 0 0
Refined metal, ditto....	4	0	0-	5 0 0
Bars, common, ditto....	5	0	0-	—
Ditto, merchant, in Tees	6	10	0-	—
Ditto, railway, in Wales	5	0	0-	5 2 6
Ditto, Swed. in London.	10	10	0-11	0 0
To arrive	10	0	0-11	0 0
Pig, No. 1, in Clyde....	2	8		- 2 10 0
Ditto, f.o.b. in Tees ..		—		- — —
Ditto, forge, f.o.b. in Tees		—		- — —
Staffordshire Forge Pig.	3	10	0-	3 12 6
Welsh Forge Pig		—		- — —

LEAD.				
English Pig	19	0	0-21	0 0
Ditto sheet	21	0	0-22	0 0
Ditto red lead	22	0	0-	—
Ditto white	28	10	0-30	0 0
Ditto patent shot.....	23	0	0-24	0 0
Spanish	18	0	0-	—

BRASS.	Per. lb.
Sheets	8½d.-9½d.
Wire	9d.- —
Tubes	10d.-10½d.

FOREIGN STEEL.	Per Ton.			
Swedish, in kegs (rolled)	15	10	0-	—
„ (hammered).	16	0	0-16	10 0
Ditto, in faggots	16	10	0-19	0 0
English, Spring	18	0	0-23	0 0
Bessemer's, Engineers Teel	44	0	0-	—
„ Spindle	30	0	0-	—
QUICKSILVER	7	0	0 p. bottle	

SPELTER.	Per Ton.			
Foreign	15	10	0-15	15 0
To arrive	16	0	0 (Nom.)	

SPELTER.				
In sheets	22	0	0-	—

TIN.				
English, blocks 117	0	0-	—	
Ditto, Bars (in barrels)..118	0	0-	—	
Ditto, Refined 119	0	0-	—	
Banca 115	0	0-(Nom.)		
Straits 111	0	0-111	10 0	

TIN-PLATES.*				
IC Charcoal, 1st qua. p. bx.	1	8	0-	1 9 0
IX Ditto 1st quality „	1	14	0-	1 15 0
IC Ditto 2d quality „	1	4	6-	1 6 6
IX Ditto 2d quality „	1	11	0-	1 13 0
IC Coke ..... „	1	2	0-	1 2 6
IX Ditto..... „	1	8	0-	1 9 0
Canada plates ....p. ton	12	10	0-13	0 0

In London; 20s. less at the works.

Yellow Metal Sheathing . p. lb.	8½d.-9d			
Indian Charcoal Pigs } in London ..... }	6	12	6- 6	15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—There has been more animation in the metal market during the past week than has been manifested for some time past, and in some metals large sales have been made, mostly, however, to speculative purchasers, for the genuine demand is still very small. It is encouraging to find that speculators have somewhat regained their confidence in the market, and it really looks now, in spite of the scarcity of foreign orders, as if prices had almost reached the minimum; doubtless the least improvement in the reports from abroad would cause the prices of metals in our market to rise very rapidly.

COPPER.—There is a decided disposition on the part of buyers to operate now, while they are able to make contracts under fixed rates, and a fair amount of business has been transacted both in English tough cake, tile, and manufactured since our last report. Foreign is in but limited demand, and quotations remain nominally as before, with the exception of Chili, which is rather better, quoted 83*l.* in Liverpool. Yellow metal not above 8¾d. to 8¾. per lb.

IRON.—Rails are rather more enquired for, but the demand is still considerably below the average. In merchant bars manufacturers have not been able to maintain even the trifling advance of 2s. 6d. per ton, which was made a short time since; there are now sellers at the original prices of 5*l.* 15s. to 5*l.* 17s. 6d., f.o.b. in London, at which business to a limited extent is doing, mostly for shipment to India and the Mediterranean. Staffordshire descriptions very dull, and quotations unaltered. Swedish bars have been sold at 10*l.* 5s. for arrival, but spot and landed parcels are exceedingly difficult to place at the current quotations—10*l.* 10s. to 11*l.* Scotch pigs exhibit an upward tendency. The failure a short time since of the Monkland Iron Company, whose make is 60,000 tons a year, has given them a spurt; mixed numbers are now quoted firm at 51s. to 51s. 6d., having advanced 9d. to 1s. per ton since last week. Shipping brands in fair request, at a proportionate advance.

LEAD.—The low prices now ruling in the market have caused buyers to come in pretty freely. A good business has been done during the week in English pigs, at prices varying from 19*l.* for ordinary qualities to about 21*l.* for WB brand. Sheets and shot are at present very dull of sale. Spanish pig, 18*l.*

SPELTER.—The nominal value of this metal is about 15*l.* 10s., cash 14 days, but importers are reluctant to accept this price, and buyers in some instances have come up to 15*l.* 15s. The arrivals lately have not been large, but there is little or no diminution in the stock, which is estimated at about 5000 tons. The demand for shipment and consumption is extremely limited; prices are unremunerative in India, and in New York there is no market; stocks there upwards of 2000 tons. France has been well supplied, and the only source of business in prospect is of a speculative character, which at all times is very uncertain. As long as the price is firmly maintained, speculators will buy closely to the current value, but immediately sellers appear buyers simultaneously withdraw.

TIN.—Buyers of English in the present uncertain state of the market will only purchase just from hand to mouth; the transactions, therefore, are extremely limited, and underselling is frequent. In foreign the tone of the maket is, perhaps, a shade firmer the last day or two, but not enough to alter quotations. Banca, 114*l.*, nominal; Straits, 110*l.* 10s. to 111*l.*

TIN-PLATES.—Very little enquiry; prices unaltered.

GLASGOW, JULY 25.—A firm market: 51s. 3d. cash has been paid, and there are still buyers at the price; sellers, 51s. 4½d. per ton. No. 1, g.m.b., 51s. 3d.; No. 3, 49s.

LIVERPOOL, JULY 25.—The condition of this market is without much alteration; the demand keeps light, and prices have generally a downward tendency. Staffordshire iron suffers most, and all the works that are not closed are running short time. Some of the men have not submitted to the reduction in wages notified by the masters in consequence of the fall in manufactured iron, but must eventually do so. Welsh iron continues in moderate request, and prices are steady at last quotations. Copper, yellow metal, and block tin, are all dull, the demand being very limited. Coke tin-plates are more steady, and nothing is done below 21s. to 21s. 3d. for all IC. Scotch pigs have continued remarkably steady, and have an upward tendency.

COAL TRADE.—On Monday, the 42 arrivals gave only a small quantity of coals for sale, and the demand for all descriptions was brisk, at fully 3d. per ton advance on Friday's prices. Best house coals, 19s. to 19s. 6d.; seconds, 16s. 6d. to 17s. 6d.; Hartley's, 15s. 6d. to 16s.; manufacturers', 12s. 6d. to 14s. 6d.—On Wednesday the supply was again short of the the demand, only 48 ships having come forward, owing to the strong adverse winds. The market was entirely cleared, at an advance of 6d. per ton on household sorts, Hartley's and manufacturers' 3d. per ton higher. Best house coal, 19s. 6d. to 20s.; seconds, 17s. to 18s.; Hartley's, 16s.; manufacturers', 12s. 9d. to 14s. 9d. per ton.—On Friday there were 21 arrivals. The whole quantity for sale to-day did not exceed half-a-dozen cargoes of coal of all kinds, and purchasers were readily found at last day's prices. Haswell Wallsend, 20s.; Russell's Hetton Wallsend, 19s.; Eden Main, 18s.; Thorpe Wallsend, 17s.: Unsold, *nil*; 170 ships at sea.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Laird, we learn that the quantities of coal exported during June was 704,337 tons, against 645,863 tons in the corresponding month of 1860, showing an increase of 58,474 tons. The particulars are—From the Northern Ports, 402,050 tons; Yorkshire, 21,464 tons; Liverpool, 63,357 tons; Severn Ports, 170,131 tons; and Scotch, 47,335 tons. The chief decrease was again at Liverpool, of 12,900 tons, while there was again an increase at the Severn Ports, of 41,971 tons. The total exports from Jan. to June were 3,456,872 tons, against 3,210,097 tons in the same period of 1860, being an increase of 246,775 tons in 1861.

COAL TRADE OF BELGIUM.—During the year 1860 Belgium exported 3,140,000 tons of coal,—an increase of nearly 100 per cent. in ten years.

COAL IN CALIFORNIA.—The amount of coal shipped to San Francisco last year from Californian mines was about 800 tons, and 80,000 tons were consumed in the State. It is thought the yield of coal from the Californian mines in the present year will be over 20,000 tons.

The unfavourable weather coming on just at the commencement of harvest—good as the crops may be—has added to the depression of the general markets. On Thursday things improved a little, under the impression that the Bank of England would reduce the rate of interest, and thus let loose a large amount of money now on deposit at the higher rates; but this was not done, and the improvement did not last. In the MINING SHARE MARKET there has not been much general business doing, but some little excitement has been observed in one or two mines where improvements have taken place, and points of interest coming off. Some of the large mines have determined to sample less ore until the standard improves, a very wise step on the part of mines that can afford it, and for shareholders who can be content with lessened dividends for a time. The chief business during the week has been in Retallack, East Caradon, North Robert, Marke Valley, Unity, North Treskerby, West Seton, West Polmear, North Downs, Condurrow, Ding Dong, West Caradon, Great South Tolgus, West Rose Down, South Frances, Rosewall Hill and Ransom United, East Russell, Camborne Vean, Wheal Uny, and a few other mines. Condurrow shares have been in request, and leave off 45 to 50; from the first report issued by the new managers they state they commenced sinking Pryce's engine-shaft on the 22d, and the lode is worth for length of shaft 100*l.* per fm. for tin, and a branch from the south will probably drop into the lode in another fathom sinking, and add considerably to its value. A stope in back of the 165 is also worth 100*l.* per fm. Other parts of the mine appear to be looking well, and it is also said that, on assaying the slimes lying as waste on the stamps' floors, they are found to contain about 8½ tons of black tin, worth at least 510*l.* At the next meeting it is hoped the balance against the adventurers will be much reduced. From all we can learn, the mine is likely ere long to resume its position in the Dividend List. Alfred Consols, 1½ to 1¾; Bryn Gwiog, 26 to 28; Calvadnack, 7 to 7½. East Grenville shares have been very firm, and leave off 42s. 6d. to 44s.; at the meeting the accounts showed a balance of 540*l.* 14s. 8d. liabilities over assets, and a call of 2s. per share was made. The tin ore sold during the quarter realised 150*l.* 3s. 3d., and the copper sampled estimated to produce 80*l.*, so that it was shown that, taking the ore raised during the three months, and the ground opened, that the shaft and ends had been of greater value than reported. The quality of the ore is greatly improving, some of it now, according to the agent, being worth 6*l.* to 8*l.* per ton; the lode in the shaft is now worth 20*l.* to 25*l.* per fm.; the 35 west, 12*l.* per fm. The agent stated at the meeting that the present engine would carry them down to the 50, that a larger one would not be required for 12 months, when he hoped the mine would be able to pay for it without any call upon the proprietors. The committee requested Capt. Roberts, the manager of West Basset, to inspect the mine and report upon it for the meeting, and his report, which was very satisfactory, concluded as follows:—"The large gossan lode is discovered in the 25 for nearly 40 fathoms in length; the ore ground in the 35 west, with a promising and productive lode in the bottom of the shaft, and strong indications of a lasting and profitable mine." Camborne Vean, 35s. to 40s., with a call of 5s. per share paid. Carn Brea, 65 to 70; Carn Camborne, 1⅛ to 1¼; Cook's Kitchen, 27 to 28; Ding Dong, 17 to 19; East Devon, 2 to 2¼; East Basset, 85 to 87½; South Carn Brea, 2½ to 3; at the meeting a call of 3s. per share was made; the balance against the mine was 167*0l.* 14s. West Basset, 17 to 18; the accounts at the meeting showed a balance of 3503*l.* in favour of the mine, and a dividend of 5s. per share was declared. The samplings, we understand, are to be reduced in future until the standard improves. Lady Bertha, 12s. to 14s.; at the meeting a call of 2s. per share was made.

Wheal Grenville shares, 1½ to 1⅝; the new shaft on East Grenville lode is now down 12 fathoms, 5 fathoms having been sunk last month, and the lode in it is quite as promising as it was in East Grenville at the same depth. The 80 cross-cut is also being extended towards the East Grenville lode, and expected to meet it in about 6 fathoms; this is an important point to watch. Great Wheal Fortune, 10 to 11; New Seton, 42½ to 45. Great Retallack shares have been in great demand, and a very large business done, the price having advanced from 13s. to 24s., and leave off 21s. to 23s.; the rise is owing to the appearances in the shaft indicating the near approach to a course of lead, a circumstance we have always considered highly probable, and which now seems on the point of realisation. A course of lead under such a mass of blende would, of course, render this property very valuable. East Caradon shares have kept pretty steady at 24 to 24½; we have not received any information from the mine this week. Marke Valley shares are flatter, at 8¾ to 8⅞. Herodsfoot shares have declined to 35, 37; the mine has just sampled 80 tons of crop ore. East Russell shares have been largely dealt in, and have fluctuated from 3¾ to 4½, and leave off 3⅞ to 4⅛; in the 110 cross-cut north the north part of the lode has been intersected and cut into 2½ feet, with a leader of ore 6 in. wide, worth 1½ ton of ore per fathom. There is still more lode to the north, which will be cut through before driving east and west. North Robert shares, which were flat at 12s. to 14s.. became in demand, owing to the intersection in the 30 west of a tin lode 2 feet wide, from which good stones of tin ore have been broken, and present appearance promising; they leave off 15s., 17s. North Downs, 4⅜ to 4¾; North Minera, 28s. to 30s.; North Treskerby, 21 to 22; Providence Mines, 34 to 36; Rosewall Hill and Ransom, 22s. 6d. to 25s.: Sortridge Consols, 12s. to 14s.; South Caradon, 300 to 305; South Frances, 115 to 120; Stray Park, 32 to 33; Tincroft, 5⅛ to 5⅜; West Caradon, 42 to 44; West Rose Down, 13 to 14; West Seton, 300 to 310; Wheal Clifford, 150 to 160; Wheal Crebor, 10s. to 12s.; Wheal Ludcott, 2⅛ to 2⅜; Wheal Mary Ann, 9 to 10; Wheal Seton, 60 to 65; Wheal Trelawny, 13½ to 14½.; Wheal Unity, 18s. to 20s.; Wheal Uny, 4 to 4¼. West Polmear shares have during the week been more in demand, at 19s. 6d. to 20s. 6d. Old Tolgus United shares have been in good request, and leave off 13 to 15; the mine is improving. South Minera shares have advanced to 3¼, 4, and the mine fully in operation, with great prospects of success. Great South Tolgus shares, 2⅞ to 3⅛; since last report a branch has been cut in the 90 cross-cut north 6 inches wide, producing good stones of copper ore. East Carn Brea, 7⅞ to 8; in the cross-cut south of the western shaft the lode has been cut, producing 2 tons of ore per fathom.

A correspondent calls our attention to the sale of East Wheal Margaret, a mine, we believe, in a first-rate district—one which has made large returns, and a few years since paid a small dividend. On May 8 a resolution was passed at an adjourned meeting of adventurers in Cornwall, that the mine and materials be advertised for sale, in one lot, by private contract, and from this it was naturally concluded that the prospects of the mine were unsatisfactory, and it was thought best to stop it. On July 10, a circular, signed by the purser, who had previously concurred in the sale of the property—as our correspondent supposes, through its poverty—issues a circular to the effect that as some large shareholders were of opinion that, after having spent so much money in sinking shafts and driving levels, and being within a few fathoms only of two very valuable runs of ore ground—the one east and the other west of the engine-shaft—it would be highly imprudent, under such circumstances, to discontinue the working of the mine, and asks the shareholders to join him in purchasing the property, with the view of forming a new company. The mine and machinery were then put up to auction, as it appears, and bought in, and on July 16, at another meeting held in Cornwall, the committee was authorised to dispose of the property at any sum they might think it right to accept beyond 1800*l.*; and if not sold privately before Aug. 1, it will be again submitted to public auction. On the 19th the purser issues another circular, stating that he has it in contemplation to purchase the property in order to form a new company, and any of the present holders intending to join him may do so, on condition of their assenting before July 31. It is not stated in any of the papers sent to us why, in the first instance, it was proposed to stop the mine; and it is concluded by our correspondent, as it will, doubtless, be by many other shareholders, that it was on account of its poverty, and he cannot understand how the same agent can consistently concur in the sale on account of its bad prospects, and at the same moment propose to purchase it on the ground of its "good prospects." Probably, however, it may be found, and the ventilation of the subject may be of benefit to the concern, by putting a clearer view of it before the shareholders, that the stoppage in the first instance was from circumstances quite distinct from the prospects of the mine.

On the Stock Exchange, there has been a slight improvement in the

demand for Mining Shares during the week. The following prices were officially recorded in British Mining Shares:—East Wheal Russell, 4, 3¾; Wheal Trelawny, 13½; East Caradon, 24½, 24; North Downs, 4¾, 4½; East Basset, 86. In Colonial and Foreign Mining Shares the prices were:—Great Northern Copper of South Australia, 1⅞, 1½, 1⅝; Port Phillip, 1; St. John del Rey, 33⅞, 33½, 33¾; 33⅞; 33⅝; United Mexican, 4¼, 4⅜, 4¼; Cobre, 35, 35½; 34⅜; Linares, 7⅛.

Foreign and Colonial Mining Shares have been inactive during the week "outside," the approaceh of the half-yearly meetings preventing any large amount of business being transacted. St. John del Rey have slightly advanced, and leave off at 33¾, 33⅞, the accounts from the mines being very satisfactory. United Mexican still decline in price, and leave off at 4⅛, 4¼; Linares, 7⅛ to 7¼; Port Phillip, 1. Mariquita, ⅜, although not much business done; the directors' report, to be presented at the coming meeting, will lay the company's affairs fully before the shareholders; and as there now appears no doubt but that the operation at the mines will be more economically conducted, different results may be anticipated. Worthing quiet, at ⅛, ¼; the half-yearly meeting will be held early next month, when, although no dividend is anticipted, a satisfactory report may be expected. Great Northern, 1½, 1⅝; another vessel has arrived, containing a further consignment of copper for this company. Cobre quiet, at 34½, 35½, in anticipation of the meeting. Labuan Coal, 2½, 3, prem. The closing quotations for shares in new undertakings are as follows:—Ocean Marine Insurance, 4¾, 5⅛, showing a fresh rise; Thames and Mersey Marine, 11-16th to 13-16th prem.; Universal Marine Insurance, ⅜ to ½ dis.; London and Provincial Marine, par; China and Japan Steam, par to ¼ prem.; Commercial Copper, par; Natal Land, ⅜, ⅛, dis.; Compressed Coal, ⅛, ⅛, prem.; Oriental and General Marine, ⅜, ⅛, prem. Mr. Philip Secretan, of Lloyd's, has been appointed underwriter to the Oriental and General Marine Insurance Company.

At Truro Ticketing, on Thursday, 3303 tons of ore were sold, realising 16,842*l.* 17s. The particulars of the sale were—Average standard, 121*l.* 7s.; average produce, 6½; average price per ton, 5*l.* 2s.; quantity of fine copper, 213 tons 13 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
June 27	2852	£119 11 0	6¼	£4 19 6	£17 1 0
July 4	2821	119 1 0	7	5 13 0	80 0 0
„ 11	2898	119 16 0	6¾	5 5 0	79 0 0
„ 18	5096	121 18 0	6⅝	4 15 0	77 4 0
„ 25	3303	121 7 0	6½	5 2 0	78 16 0

Compared with the sale of last week, the advance has been in the standard 1*l.* 2s., and in the price per ton of ore about 1s. 5d. Compared with the corresponding sale of last month, the advance has been in the standard 1*l.* 16s., and in the price per ton of ore about 2s. 6d.

The TIN STANDARD has declined 3*l.*, the present price being 104*l.* for common, and 105*l.* to 106*l.* for refined.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 7168*l.* (7*l.* per share), arising from profits on sales of copper ores sampled in the months of March and April last. After payment of same, there remains in hand a balance of 22,184*l.* 7s. 6d. in cash, ore bills not at maturity, and reserved fund, applicable to the general purposes of the company.

At the Great Wheal Fortune meeting, on Wednesday, a dividend of 10s. per share was declared.

At West Basset Mine meeting, on Wednesday (Mr. T. Bushell in the chair), the accounts for April and May showed—Balance last audit, 1405*l.* 0s. 9d.; copper ore and tin sold, 6538*l.* 14s. 10d.; advance on tribute, 380*l.*=8323*l.* 15s. 7d.—Mine costs, 3836*l.* 0s. 5d.; advance on tribute, 370*l.*; royalty, less income tax, 419*l.* 11s. 3d.; boundary costs, 166*l.* 18s.; sundries, 27*l.* 18s. 6d.: leaving credit balance, 3503*l.* 7s. 5d. A dividend of 1500*l.* (5s. per share) was declared, and 2003*l.* 7s. 5d. carried to credit of next account. It was proposed to limit the samplings during the present low price of copper. Captain W. Roberts reported that although the ends at present were not very productive, yet, on the whole, their prospects were tolerably good. He calculated that on Wednesday they would sample about 490 tons of ore.

At Wheal Buller meeting, on July 16, the accounts for May and June showed—Balance last audit, 541*l.* 13s. 5d.; labour cost, 1973*l.* 14s. 4d.; merchants' bills, 534*l.* 4s. 10d.=3049*l.* 12s. 7d.—By copper ores, 1419*l.* 14s. 5d.; tin ores, 1455*l.* 0s. 4d.; sundries, 62*l.*: deduct lord's dues (1-16th) and 350*l.* charged on account of tin last meeting, leaves to credit, 440*l.* 15s. 7d. Loss on the two months' working, 100*l.* 17s. 10d. Capts. J. Davey, J. Johns, and J. Uren state that "Since the last account the standard of copper and the price of tin have considerably fallen, and we have been hindered by fixing the surface lift, making alterations in the tin floors, and a breakage of the stamps, which have caused a delay of fully a fortnight, and in the first fortnight the tinstuff stamped was of inferior quality, in consequence of the best work having been taken away in the former month. The fall of tin from the highest price is 15*l.* per ton."

At the Lady Bertha Mine meeting, on Thursday (Mr. Upton in the chair), the accounts showed a debit balance of 1145*l.* A call of 2s. per share was made.

At the Molland Mine meeting, on Wednesday (Mr. J. Rowlands in the chair), the accounts showed a balance of liabilities over assets of 156*l.* A call of 1s. per share was made. It was stated that 60 tons of ore would be sent to Barnstaple in a few days, of the average quality of 6¼. The names of the shareholders in arrears of call it was resolved should be handed over to the merchants. Messrs. Rowlands, Kirkwood, and Capt. Diggens were re-appointed the committee of management.

At Camborne Vean meeting, on Tuesday, the accounts for May and June showed - Balance last audit, 12067. 13s. 2d.; mine cost, 15337. 3s. 8d.=2739*l.* 16s. 10d.; calls received, 1380*l.*; ore sold, 302*l.* 15s. 1d.: leaving debit balance, 1056*l.* 18s. 9d. A call of 5s. per share was made.

At Wheal Falmouth and Sperries meeting, on July 18, the accounts showed—Balance last audit, 264*l.* 2s. 1d; silver gossan, less dues, 1396*l.* 12s. 9d.; copper ore, 74*l.* 15s. 2d.; silver-lead, 30*l.* 9s. 9d.; tin ores, 30*l.* 14s. 6d.; mundic, 2077*l.* 10s. 3d.; spare materials, 4*l.* 3s. 8d.=3878*l.* 8s. 2d.—Labour cost, Jan., Feb., March, and April, 2622*l.* 17s. 5d.; merchants' and other bills, 1042*l.* 19s. 6d.: leaving to credit, 212*l.* 11s. 3d. Captain Kitto was authorised to proceed to the North of England, and call on the consumers of mundic, with a view to effecting sales on the best possible term. Capts. Kitto remarked "That if the sale of mundic had continued, such as we had last year, our book would have presented a balance in favour of the adventurers of at least 2000*l.*, instead of, as at present, about 200*l.*"

At the Dyfngwm Mines bi-monthly meeting, on Thursday, the accounts showed a balance in favour of the mines of 658*l.* 9s., and a supplementary report from the manager was read, announcing a further improvement in the 40 east, as well as in the 70 fathom level.

At the Stencoose and Mawla United Mines meeting, on July 16, the accounts showed a debit balance of 347*l.* 19s. 2s. A call of 10s. per share was made. Capt. N. Reed reported on the mine; they have 15 men underground, 7 boys, 3 engine-men, 1 blacksmith, and a carpenter occasionally.

At West Wheal Lovell (Wendron) meeting, on July 15, the accounts showed a debit balance of 1013*l.* 4s. 5d. to the end of June. A call of 1*l.* per share (900*l.*) was made. Mr. W. Page Cardozo and Mr. W. E. Cudlip were appointed joint pursers, in the room of Mr. Clarke, who resigned. The thanks of the adventurers were passed to the latter for his past services. A 30-in. cylinder engine has been erected, and the water drained to the bottom of the mine, 20 fms. The agent expects within a week to clear out the levels of attle, &c., and commence exploring. About 120 years since this ground was worked to a depth of 20 fms. by means of a water-wheel, and to that depth there is sufficient evidence to judge that large quantities of lead were discovered and smelted on the spot, as some portion of the smelting-house and articles used by them are still on the spot. In draining out the mine some curious old wood pumps, workings, &c., have been discovered and brought to surface.

At the East Treskerby Mine meeting, on Tuesday, a call of 10s. per share was made.

At West Wheal Trevelyan meeting, on Wednesday (Mr. F. R. Wilson in the chair), the accounts showed a balance of liabilities over assets of 292*l.* 14s. 8d. A call of 3s. per share was made. A resolution was passed to resume the sinking of the engine-shaft below the 58. Details appear in another column.

At the East Wheal Grenville meeting, on Thursday (Mr. F. R. Wilson in the chair), the accounts showed a balance of 540*l.* against the mine. A call of 2s. per share was made. Particulars will be found in another column. The mine having occupied a prominent position before the public for the past three months, during which period the most conflicting rumours have been circulated in regard to its prospects, it must be gratifying to the *bona fide* adventurers to find that the reports and statements of the agents of the mine have been verified by the returns of mineral; and it must also be satisfactory to find their report also confirmed by no less an authority than Capt. Roberts, of West Basset. We hear the most favourable accounts of the mine from other quarters, and there appears to be scarcely a doubt but that in a short time it will become one of the leading mines of the day.

At the West Wheal Trevelyan meeting, on Wednesday (Mr. F. R. Wilson in the chair), the accounts showed balance of liabilities over assets of 292*l.* 14s. 8d. A call of 3s. per share was made.

At South Carn Brea Mine meeting (Mr. W. A. Thomas in the chair), the accounts for April and May showed—Balance last audit, 2759*l.* 12s. 7d.; mine costs, 1815*l.* 12s. 3d.; advance on tribute, 25*l.*; interest and commission, 87*l.* 3s.; sundries, 112*l.* 11s. 8d.=4396*l.* 19s. 6d.—Calls received, 1805*l.* 4s. 6d.: tin sold and sundries, 921*l.* 1s.: leaving debit balance, 1670*l.* 14s. A call of 3s. per share was made. Capt. Thos. Glanville estimates that in the next two months they will return 16 tons of tin; their costs will be 1700*l.* In future their returns will increase in proportion to their stamping power.

At East Wheal Falmouth meeting, on July 18, the accounts for the three months ending May showed—Balance last audit, 62*l.* 5s. 3d.; calls received, 309*l.* 15s. 3*l.* 0s. 3d.—Mine cost, 201*l.* 4s. 11d.; G. S. Arnall, 26*l.* 9s. 4d.; interest, 2*l.* 4s.: leaving credit balance, 142*l.* 2s. A call of 5s. per share was made. Capt. W. Hancock reported upon the various points of operation.

At the West Condurrow meeting, on Tuesday, a call of 10s. per share was made.

At Condurrow Mine special meeting, on Tuesday, it was resolved that the engine offered to the purser, by Mr. Pike, for 225*l.*, be purchased and put in as soon as possible. It is hoped that before the September meeting the debit balance will be reduced. Capts. Bennett and Davey reported upon the position and prospects of the mine.

At the Wheal Agar meeting, on Friday (Mr. H. Hill in the chair), the accounts for May and June showed—Balance last audit, 383*l.* 4s.; May mine cost, merchants' bills, &c., 271*l.* 11s. 8d.; June, 388*l.* 7s. 3d.; advance on tribute, 25*l.*; interest and commission, 38*l.* 13s. 8d.; sundries, 10*l.* 11s. 7d.=1117*l.* 8s. 2d.—Advance on tribute, 30*l.*; part rent of stamps, 10*l.*; stores sold, 1*l.*; copper ore sold, 378*l.* 3s. 2d.; calls received, 465*l.* 16s.: leaving debit balance, 242*l.* 4s. A call of 2s. per share was made. The report of Captain W. Roberts stated that in the last two months good ore ground has been opened in the bottom level, and the present ends were turning out tolerably well; another month would most likely put the engine-shaft down for a 90, where a cross-cut of about 3 or 4 fathoms south would, they expect, intersect the lode. Altogether the prospects of the mine might at present be considered very favourable.

At the Cumberland Black Lead Mine meeting, on Tuesday (Mr. Lindo in the chair), it was unanimously agreed that the company should be wound-up voluntarily. Mr. Yarrow having been appointed liquidator, the necessary steps were taken for the formation of a new company, to be called the Borrowdale Black Lead Company, to which the shareholders have already subscribed. Details in another column.

At the Scottish Australian Investment Company half-year meeting, yesterday (Mr. W. H. Dickson in the chair), the report and accounts, an abstract of which appeared in last week's Journal, were received and unanimously adopted, and the dividend of 10 per cent. per annum upon the ordinary stock was declared. The Chairman, in moving the adoption of the report, stated that it was impossible to come to any conclusion other than that the report just read showed a steady and satisfactory progress. With regard to the Pyrmont Bridge, the Government were doing everything in their power to promote the erection of bridges and the construction of railways, all of which must tend to give increased traffic to the Pyrmont Bridge. The gross profits realised in the colony during the half-year was 12,259*l.*, to which must be added the sum of 481*l.* received in London for interest, transfer fees, &c., making an aggregate gross profit for the six months of 12,741*l.* A vote of thanks to the Chairman and directors terminated the proceedings.

At the Mariquita and New Granada Mining Company meeting, on Monday next, the accounts to be presented for the year ending March 31, 1861, will show that the company have at their disposal (in addition to the mines of Marmato, Santa Ana, Purima, and El Pleito, and office furniture in London)—Stock on hand at the mines, 12,646*l.* 17s. 10d.; cash at Bogota, 2214*l.* 11s. 6d.; cash and bills in London, 684*l.* 15s. 3d.; and debts due to the company, valued at 111*l.* 1s. 2d.=15,657*l.* 5s. 9d.—Against this they have liabilities—Debentures, 12,600*l.*; loans due to bankers, 2364*l.* 6s. 8d.; bills payable, 287*l.* 17s.; unclaimed dividends, 736*l.* 1s. 9d.; sundry creditors, 5019*l.* 3s. 6d. =21,007*l.* 8s. 11d.: leaving debit balance, 5350*l.* 3s. 2d. The profit on the year's working at Marmato was 1098*l.* 18s. 11d.; and the loss at Santa Ana, 710*l.* 12s. 1d. A full abstract of the report is given in another column.

At the Clarendon Consolidated Mining Company of Jamaica meeting, on Wednesday next, the report to be presented will state that the cash in hand to June 30, including money on loan, amounted to 5692*l.* 15s. 3d. The directors have merely to state that since the February meeting the mining operations at Stamford Hill have been progressing satisfactorily. Capt. Martin still entertains the same favourable opinion regarding the ultimate success of the undertaking; he is now dressing the ore taken out as fast as his present appliances will permit. Had it not been for the unusually heavy rains lasting continuously for almost two months, effectually stopping all means of transit, and materially impeding the surface work at the mine, a small shipment would ere this have been made. Stamford Hill lode is now opened 94 fms. from the surface—a continuous well-defined lode, with a better yield than was expected at that depth, and with every indication of increased value as the shaft descends. The last report from the mine is dated June 21, and was published in last week's Journal.

The *Dover Castle* has arrived in the East India Docks with 95 tons of copper ore for account of the Great Northern Copper Mining Company of South Australia. The declared value is 2850*l.*

LEEDS, JULY 24.—The Mining Market continues quiet, few transactions have taken place, and quotations present little variation.—Brea Consols, 18s. to 20s.; Craven Moor, 3s. to 4s.; East Polberro, 10s.; Hebden Moor, 18s. to 22s.; North Hallenbeagle, 25s. to 30s.; Wensleydale, 7s. 6d. to 8s.

The Copiapo Smelting Company quote their copper at 90*l.* per ton.

REDUCTION ON THE AMERICAN IMPORT DUTY ON IRON AND STEEL.—We are gratified to learn that the evils arising from the exorbitant duties imposed by the Morrill Tariff are likely to be remedied by the adoption of the new War Tariff proposed by Mr. Chase, and which, although it provides not only for the augmentation of the duty upon a very large number of articles which have previously been subjected to taxation, but also for the levying of an impost upon articles which have previously been altogether exempt, it is satisfactory to find that, so far as regards metallic products, there has been in several instances a diminution, as will be seen from the subjoined comparison of the qualities of iron in which, perhaps, the largest amount of business is transacted:—

	Present Tariff.	Mr. Chase's Bill.
Iron, pig, per ton	$ 6	$ 5
Bar „	15	14
Railroad „	12	10

Mr. S. Griffiths, in his Circular, says—"Our returns of furnaces in and out of blast in the kingdom show a greater number of furnaces out of blast than we anticipated. The number in blast is 519, the number out of blast is 363; and if the nine furnaces of the Monkland Company are stopped in two or three weeks, the number out of blast in the whole kingdom will be 372, against 288 in the first week in Jan. last, which shows a reduction in the make of pig-iron at the rate of 40,320 tons per month, or 483,840 tons per annum. These figures tell their own tale, requiring no comment from us."

THE PIG-IRON TRADE.—The shipments o pig-iron from Scottish ports, after a long period of continued activity, have at last experienced a check. During the last four months the exports have increased about 45,000 tons, but last week they fell off from 14,000 tons to 11,279 tons. The number of furnaces in blast throughout the United Kingdom at the commencement of the present month was 519, while 363 were out of blast. In January the number of furnaces out of blast was 288, so that 75 have been blown out during the past six months, and the production has been reduced to the extent of 40,000 tons per month. The Cleveland and Middlesborough districts have, however, exhibited, like the Scotch makers, a good deal of activity, the exports during the last six months having increased 19,000 tons over the corresponding half of 1860. "This," observes Mr. Griffiths, of Wolverhampton, in his Circular, "augurs well for Middlesborough, and proves that the Middlesborough brands are taking the lead in the foreign markets over the Scotch. This preference is given particularly by consumers in France and America." It will be observed, however, that while the Cleveland shipments have increased 19,000 tons, the Scotch shipments have been more than maintained, having increased in the first six months of this year about 40,000 tons. The principal falling off would appear to be in the districts further south. The works of the Monkland Iron Company are to be carried on by the creditors on a limited scale for the present, but as the bankers concerned in the suspension are not disposed to make further advances, it is not improbable that the furnaces will soon be blown out. The company, besides being engaged in the manufacture of malleable iron and steel, had nine blast furnaces, producing about 60,000 tons annually.

MINING IN PRUSSIA.—From time to time we have alluded to the immense field which Prussia, and more especially the western provinces, offers for the profitable employment of British capital in the development of the rich and extensive mineral deposits in which those districts abound, and it is, therefore, gratifying to notice the publication of the personal observations of Englishmen upon the character and prospects of Prussian mines, inasmuch as some definite idea can be formed of the general resources of the country from its mineral wealth, although these observations are, in most instances, necessarily confined to a particular mine or mining district. The great inducements which Westphalia holds out to English capitalists have already been pointed out, and the consequence has been that some considerable attention has been turned to the district by Englishmen, and it seems probable that the mineral wealth of Prussian-Saxony will now be made more generally known. With respect to this district, we have during the past few weeks been publishing an epitome of a very elaborate series of papers, contributed to the Society of Arts by W. P. Jervis, upon the celebrated copper mines of Mansfeld, and although it is not at all probable that those particular mines will ever pass out of German hands, the account of them is highly interesting, from the facilities offered of estimating the value of the surrounding districts. Mr. Jervis very minutely and accurately describes, not only the mines themselves, but also their past and present state, and the whole of the metallurgical processes employed, and furnishes, moreover, ample statistics and much useful information upon the administration of the mines, the social condition of the miners, and their benevolent fund, &c., rendering the whole even more valuable by the introduction of judicious comments of his own upon the facts and circumstances recorded. We know not whether it is Mr. Jervis's intention to re-publish the papers in a collected form, but do not hesitate to state that they would form a valume which would be read with much pleasure by miners generally, and by mining capitalists also. The history of a company which secures a livelihood to some 60,000 persons, and has continued to do so for a very lengthened period, although engaged upon a single mining sett only, cannot fail to excite attention, and the publication of such histories as that of Mr. Jervis must be at once productive of benefit to the district described, and of profit to those engaged in the working of mines.

THE AUSTRALIAN MINING COMPANY.—On Tuesday last, by order of the directors of this company, Mr. V. J. Collier (of the firm of Collier and Thomas) submitted for sale, by public auction, the Tungkillo and Charlton estates, South Australia, the freehold rights of which are the property of the company. From the Tungkillo estate, which comprises 20,000 acres of land, considerable quantities of copper ore were raised, and it has also been found to contain some auriferous quartz and other minerals. It is situated about 36 miles from Adelaide, and about 7 miles from the River Murray. The only offer for this property being considerably less than the reserve price, it was bought in on behalf of the company for 35,000*l.* The Charlton estate, comprising nearly 600 acres of land, is about 120 miles from Adelaide and 50 miles from Port Augusta. This estate has also yielded copper ore of a high percentage, and the surface land is stated to be of a very superior quality, a large proportion being especially adapted for tillage. For this property also there was but one offer. It was, consequently, bought in on behalf of the company for 5000*l.* It was stated at the sale that the Tungkillo property has recently received an additional value by reason of the important mineral discoveries at Yorke's Peninsula.

THE BRYNGLAS SILVER-LEAD MINE.—Mr. Marsh submitted this property for sale at the Auction Mart upon July 18. The mine is situated near Ponterwydd, Cardiganshire, and comprises machinery and plant. An engine-shaft has been sunk 26 fathoms, and driven 25 fathoms north on the course of the lode. The present company, it appears, have sold 55 tons of lead, which realised 873*l.* As there was no bidding the property was withdrawn.

KELVINSIDE COLLIERY INUNDATION.—A recent report from the scene of this catastrophe, by which five men have probably lost their lives, states that the means employed for taking out the water is by two water cisterns, open at top, and attached to the ropes descending the two shafts. These water-tight boxes or cisterns will measure about 40 cubic feet; they have a small trap-door in their bottom, which is hinged to open inside the box as it descends into the water, and when filled closes like the clack of a pump as the box ascends. The water is then discharged into a trough which conducts it from the pit. And these two boxes being taken up and let down alternately by the engine, the contents of the one is regularly drawn up and discharged every minute, which we were told amounts to about 420 gallons, and which reduced the quantity of water in the pit during one night by about 14 inches. The old pumping-engine at the old pit was stopped for repairs, but would speedily be reset to work.

It is with regret that we have to allude to the manner in which a certain mine, situated in the Tavistock district, has been conducted, some of the shareholders who had paid all their calls having been sued, and executions put in their offices, by creditors of the mine, while at the same time calls to a large amount are owing from gentlemen who, as committeemen, are receiving a remuneration] for seeing that the affairs of the mine are properly attended to. We trust that the committee will deal more justly with the general body of shareholders, and thus release us from the unpleasant duty of detailing the particulars of the complaint.

Mr. Paul Raby, and Smith, the mining agent, and his clerk, charged with conspiring to defraud in connection with certain mining transactions at Leeds, have been tried and convicted at the York Assizes. Raby was sentenced to twelve months' and Smith to six months' imprisonment.

DUCHY OF CORNWALL.—We are informed (though unofficially) that Mr. James Robert Gardiner, the secretary of the Duchy of Cornwall, has found it necessary to resign the post wherein he has for many years exercised a degree of influence that has not been always beneficent. We trust that the Duke of Cornwall may enter upon his noble possessions free from the unfavourable *prestige* which has hitherto attached to the administrators of his estates.—*Cornish Telegraph.*

The National Bank has declared a dividend of 8 per cent. per annum, together with a bonus of 15s. per share for the past half-year, free of income tax, being together at the rate of 14 per cent. per annum upon the paid-up capital.

RISCA COAL AND IRON COMPANY.—The Master of the Rolls has made a further call, of 75*l.* per share, on the contributories of this unfortunate concern.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending July 21 was 12,728*l.* 16s. 10d.

"CORNISH NOTES."—The first edition of the "Notes made during a recent Tour in Cornwall and Devon," by Mr. J. Y. Watson, F.G.S., having been sold, a second edition, revised by the Author, has been printed, and copies, 1s. each, can be had of Messrs. Watson and Cuell, St. Michael's-alley, Cornhill, or at the *Mining Journal* office, 26, Fleet-street, London.

Now ready, price 6s., or 7s postage stamps, Mr. THOMAS TAPPING on the COLLIERY AND ORE-MINE INSPECTION AND TRUCK ACTS. The work can be had from the *Mining Journal* office, 26, Fleet-street.

LEAD ORES.

Sold on the 15th July.

Mines.	Tons.	Price per ton.	Purchasers.
North Laxey	10	11 10 0	Panther Co.

Sold on the 22d July.

East Darren	160	13 15 0	Panther Co.
Goginan	50	14 10 0	ditto
ditto	11	14 5 0	ditto
Cefn Brwyno	52	11 0 0	ditto
Cwm Erfin	40	13 15 0	ditto
ditto	10	13 15 0	ditto
ditto	10	13 15 0	Sims, Willyams, & Co.

Sold on the 23d July.

Wheal Mary Ann	70	25 4 6	T. Somers.
ditto	70	8 3 6	Sims, Willyams, & Co.

Sold on the 25th July.

North Minera	50	11 2 6	Locke, Blackett, & Co.
Westminster	90	11 1 6	Newton, Keates, & Co.
Mount Pleasant	50	11 7 6	ditto
Pool Park	20	11 4 0	ditto
Nant-y-Iago	4	10 4 0	Walker, Parker, & Co.
Park	23	11 4 0	Newton, Keates, & Co.

BLACK TIN.

Sold on the 18th July.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Pednandrea	8 12 0 6	—	£568 5 3	Carvedras Co.

Sold on the 20th July.

St. Austell Consols	9 15 0 0	£66 10 0	648 7 6	Enthoven.

COPPER ORES.

Sampled July 10, and sold at the Royal Hotel, Truro, July 25.

Mines.	Tons.	Price.	Mines.	Ton.	Price.
United Mines	97	£2 1 0	North Treskerby	51	£4 7 6
ditto	76	4 1 6	Tywarnhaile	74	4 1 0
ditto	75	1 9 0	ditto	68	2 12 0
ditto	73	3 16 6	ditto	54	4 5 6
ditto	70	0 11 6	ditto	53	2 8 6
ditto	21	4 16 6	ditto	49	3 14 0
ditto	18	2 4 6	ditto	8	3 12 0
ditto	16	3 8 6	North Downs	83	7 17 0
ditto	14	0 10 0	ditto	72	6 6 6
Great Wheal Busy	77	1 19 6	ditto	63	11 5 0
ditto	76	3 0 6	ditto	62	6 4 0
ditto	75	3 3 6	Craddock Moor	79	8 11 6
ditto	69	2 18 6	ditto	67	7 8 6
ditto	66	2 8 6	ditto	29	1 18 6
ditto	62	3 8 0	ditto	20	6 7 0
ditto	20	6 12 6	St. Day United	50	5 19 6
South Caradon	80	6 6 6	ditto	48	3 5 0
ditto	78	8 11 6	ditto	40	3 16 0
ditto	65	7 15 0	ditto	32	1 8 0
ditto	60	5 4 6	Wheal Polmear	67	4 17 6
ditto	45	16 14 6	ditto	53	4 13 6
ditto	40	16 17 6	Gonamena	67	4 13 6
ditto	34	9 16 6	ditto	30	2 9 0
ditto	23	6 5 6	Great Briggan	24	7 12 6
Fowey Contols	81	5 11 6	ditto	20	3 9 0
ditto	80	5 6 6	Perran Mines	37	4 17 6
ditto	67	5 7 6	ditto	3	3 11 6
ditto	51	5 18 6	East Polmear	15	2 13 6
ditto	50	5 2 6	ditto	10	10 10 0
North Treskerby	73	4 1 0	Wheal Ellen	11	2 7 6
ditto	71	9 15 6	ditto	8	2 8 0
ditto	63	3 16 6	Falmouth and Sperries	18	2 2 6
ditto	55	4 7 6	Wh. Mary Great Con...	17	5 18 6

TOTAL PRODUCE.

United Mines	460	£1139 19 0	Wheal Polmear	120	£574 8 0
Great Wheal Busy	445	1325 5 6	Gonamena	97	386 14 6
South Caradon	425	3898 2 0	Great Briggan	44	252 0 0
Fowey Consols	329	1796 2 6	Perran Mines	40	191 2 0
North Treskerby	313	1694 8 0	East Polmear	25	145 2 6
Tywarnhaile	306	1045 19 6	Wheal Ellen	19	45 6 6
North Downs	280	2200 2 0	Falmouth & Sperries	18	38 5 0
Craddock Moor	195	1357 14 6	Wh. Mary Great Con.	17	100 14 6
St. Day United	170	651 11 0			

Average Standard ..... £121 7 0 | Average Produce 6½
Average Price per ton £5 2 0
Quantity of Ore ..... 3303 tons | Quantity of Fine Copper, 213 tons 13 cwts.
Amount of Money £16,842 17 0

LAST SALE.—Average Standard ..... £121 18 0.—Average Produce 6¾
Standard of corresponding sale last month, £119 11 0.—Produce, 6½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Vivian and Sons	378½	£1787 8 9
Freeman and Co.	216½	672 2 6
Grenfell and Sons	647½	3461 1 9
Sims, Willyams, and Co.	376½	2820 0 9
Williams, Foster, and Co.	529	3580 19 6
Mason and Elkington	318	1702 5 6
F. Bankart	53	247 15 6
Copper Miners' Company	403½	1673 1 3
Charles Lambert	269½	666 12 0
Sweetland and Co.	111	231 9 6
Total	3303	£16,842 17 0

Copper ores for sale on Thursday next, at Tyack's Hotel, Camborne.—Mines and parcels.—Wheal Clifford 660—East Pool 427—West Seton 368—Tincroft 352—Wheal Basset 243—Condurrow 241—South Frances 204—East Crinnis 202—Wheal Seton and Pendarves 189—Trevoole 169—East Basset 146—South Tolgus 156—Stray Park 117—Camborne Vean 79—South Crofty 69—West Tolgus 54—Dolcoath 52—Wheal Grenville 44—East Grenville 26.—Total, 3778 tons.

Copper ores for sale on Thursday week, at Tabb's Hotel, Redruth.—Mines and parcels.—West Basset 490—Carn Brea 403—Great Wheal Alfred 300—Levant 278—Par Consols 265—Pendeen Consols 252—Great South Tolgus 155—United Mines 130—Treloweth 125—East Alfred Consols 121—Charlotte United 114—Rosewarne United 112—Wheal Buller 76—Copper Hill 71—Wheal Unity Consols 56—West Wheal Providence 20—Rosewarne Consols 17—Spearn Moor 14—Camborne Consols 10—St. Aubyn and Gryils 7—Roscaswell Mine 4.—Total, 3015 tons.

FOURTH SALE IN JULY.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1851	2986	7⅛	£14,881 19 6	£102 5 0	£65 17 0	£84 0
1852	3460	6⅞	21,054 19 0	129 4 0	89 0 0	102 10
1853	2887	6⅜	15,635 3 6	127 10 0	84 12 0	107 10
1854	3502	6⅜	21,502 3 6	140 1 0	96 14 0	126 0
1855	4012	6¾	25,127 2 0	146 12 0	101 17 0	126 0
1856	3511	6¾	18,922 14 0	127 0 0	84 2 0	107 10
1857	3730	6⅜	23,267 5 0	135 15 0	94 4 0	117 0
1858	2995	6⅜	15,699 9 6	124 6 0	81 11 0	107 10
1859	3105	6¾	19,847 18 6	135 5 0	99 11 0	107 10
1860	3053	7	18,098 6 6	124 2 0	85 7 0	102 10

The copper in the ore expresses the nett price per ton of copper paid to the miner.

Copper ores for sale at Swansea, July 30.—Chili 67, 62, 61, 60, 59, 67, 63, 62, 61, 59—Knockmahon 61, 60, 32, 106, 93, 45—Lochwinnoch 14, 9—Australian Regulus 14, 4—Precipitate 12—Total, 1071 tons.

Now ready, price 1s.,

THE PROGRESS OF MINING IN 1860,
BEING THE SEVENTEENTH ANNUAL REVIEW.
BY J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

The SIXTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 31, 1859, and January 7, 1860.

A FEW COPIES of the REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL. 60

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines, which they have reason to believe will pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application. 61

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 30TH MARCH, 1861, with Particulars of the Principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Five Years, &c., is NOW READY. Price One Shilling. At 117, Bishopsgate-street Within, London, E.C.
Reliable information and advice will at any time be given on application.

Also, COPIES of "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column. M

Notices to Correspondents.

*** Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

LIABILITY OF PURSERS.—The purser of a mining company has no official power to bind it by issuing Bills of Exchange, and if the company give the purser a special power to issue bills he can only do so to the extent of his power, and the excess is void as against the company and the adventurers. An action will lie against the purser for maliciously and deceitfully exceeding his instructions, and thereby causing his company pecuniary liabilities; and his shares may be taken in execution or attached, in order to satisfy a judgment given in such an action against him. The facts of the question put would point to grossly illegal conduct by the purser, for which he is, perhaps, criminally liable—that he is civilly liable in an action is unquestionable. As to the power of a purser to issue Bills of Exchange, &c., on behalf of his adventurers, see "Tapping's Cost-book Essay," third edition, p. 59.—COST-BOOK.

THE COST-BOOK SYSTEM.—Will any of your legal readers oblige by informing me whether a relinquishing adventurer in a Cornish Mine, worked on the Cost-book System, is entitled to any, and what, portion of the materials on his going out of the concern, and *when*, if so entitled, the remaining adventurers are required to account with him for the same, presuming that his notice is good, and that he has discharged all his liabilities in the mine in accordance with same?—A. B.

BOG IRON.—Can any of your correspondents inform me whether there is any patent in operation for using bog iron for dyeing purposes, staining glass, &c.—INQUIRER.

"C. H."—We never interfere in the sale or purchase of shares. The names and addresses of most brokers appear in our advertising columns, applications to any of whom will be readily attended to.

"G. S." (Paddington).—We understand that there is no such shareholder on the books of the mine alluded to, and, therefore, it is almost unnecessary to notice the remarks made. The amount of capital stated was the same in the reports of four different practical authorities, which our correspondent must have noticed, if he has the book he refers to; and it could only be considered as something like an approximate estimate of what would be required according to the opinion of these agents. Is there a railway in the kingdom that has not wanted very much more capital than the engineers at first estimated? Besides, in this case a very good reason was given at the late meeting.

GREAT RETALLACK.—Allow me again a space to protest against the plan adopted by the secretary of the Great Retallack, of requesting the agent to send his weekly report on the day the Journal is published. I am surprised that the shareholders tolerate it, and I am more surprised that the committee, after my last letter, should not have ordered the weekly report to be sent in time for your Journal. Committeemen and secretaries are only men, and, therefore, no one can be surprised if they should take advantage of any improvement that may take place before it becomes known to the shareholders. I know of one mine in which the secretary has been buying up the shares; and supposing that the account from Great Retallack, which will reach the secretary on Monday, should announce that a lead lode had been cut, is it not very probable that some official would take advantage of it, and buy up all the shares they could lay their hands upon before next Saturday, when it would (according to the present arrangement) appear in the Journal? I say such a course cannot be tolerated, and I for one will not cease to protest against it until it is changed. It is such conduct that makes mining (and justly so, in my opinion) so unpopular.—A GREAT RETALLACK SHAREHOLDER.

NORTH WALES SLATE QUARRIES.—A letter has been forwarded for "CYMRO."

ASSAYERS' BLAST-FURNACE.—For simplicity of arrangement and portability, Seftstrom's furnace is very superior. It is formed of two cylinders of sheet-iron, placed one within the other. Both cylinders are provided with a bottom, and fixed together by the top air-tight, in such a way as to leave an equal space between sides and bottoms. The best mode of obtaining the blast is by a rotating fan-blower, similar to those sometimes used for domestic purposes. When this blower is employed the nozzle should be held about a quarter of an inch from the orifice which is provided near the bottom of the outer case, and which must be made slightly funnel-shaped. The smaller cylinder and its lining of fire-clay is pierced near the middle of the sides with eight holes, all pointing towards the centre of the furnace, and through these there is an ample blast from the air compressed within the air-tight case by the action of the blower. The crucible to be heated is placed in the middle of this arrangement, on a piece of fire-brick, kept in its place by a little fire-clay. The heat produced in this little furnace is very intense, so much so that a furnace having an internal diameter of 6 in., and externally as large as an ordinary bat, is capable of melting with the greatest ease several ounces of cast-iron. The fuel used for a small furnace of this kind should be charcoal, broken into pieces of about the size of nutmegs. Simple as this little apparatus is, it may be successfully employed in running down large quantities of gold-dust, and may be advantageously employed whenever the practical miner is in doubt as to the contents of the ore he is working.—D. A.

FRANK MILLS MINE.—In last week's Journal it was stated that the sale of lead ore from this mine was 60 tons, at 7*l.* 5*s.* 6*d.* This is an error: it should be as follows:—110 tons, at 17*l.* 12*s.* 6*d.*, to the Treffry Estate; and 60 tons, at 14*l.* 5*s.*, to Stock and Co.—J. P. NICHOLLS.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JULY 27, 1861.

IMPORTANT TO THE MINING INTEREST.

[FROM A CORRESPONDENT.]

The attention of miners and mineral owners should be at once directed to a bill brought in by the Government, which has passed the House of Commons, and a second reading in the House of Lords, and which, I think, may seriously affect mining industry, if it become law in its present shape. I allude to *The Salmon and Trout Fisheries Bill.* The Cornish Members of Parliament appear to have made an ineffectual attempt to get it amended in committee in the Commons, but in other respects the bill has been allowed to pass almost unnoticed by the mining interest.

The 5th clause of that bill enacts that "*every person who causes, or knowingly permits, to flow, or puts, or knowingly permits to be put, into any waters containing salmon, or into any tributaries thereof, any liquid or solid matter to such an extent as to poison or kill fish, shall incur the following penalties*"—that is to say, not exceeding 5*l.* on the first conviction, 10*l.* on a second conviction, and 2*l.* for every day during which the offence is continued, and 20*l.* a day upon every subsequent conviction.

By the interpretation clause the word "salmon" is to mean a host of fish of the salmon species, 49 of which are enumerated, and including peal, sea trout, &c.

Now, I ask how, in the face of such an enactment, are many of our most valuable mines to be carried on? The clause is retrospective as it stands. At present many of our Cornish mines must discharge their mundic water into a tributary stream occasionally frequented by sea trout or peal. Mundic water does poison some fish (and all fish are included in this clause), and thus, if this Act passes, the miners are at once exposed to tremendous pecuniary penalties, equal, at 20*l.* per day, to more than 7000*l.* a year. In the case of some mines, where small streams have been affected by the mundic water, they have already paid to the lords adjoining the stream the fee simple value of the land for the damage done, and now they are to be met with *post facto* legislation and ruinous penalties. To add *to the injury*, by clause 32 a portion of the penalty (not exceeding one-half) is to be paid to informers, so that a premium is offered to any one who will attack the miners, whether he is injured by their acts or not.

In Cornwall, a mining industry raising 2,000,000*l.* of mineral produce annually is thus to be sacrificed for the preservation of a few dozen fish, not worth 50*l.* a year, and not known to frequent in any appreciable quantity the Cornish rivers, or to have been at all affected by its mines, which have been worked for centuries. I need not enlarge on this matter, the danger of such an enactment to the mines must be self-evident. It may be said, and has been said in the House of Lords, that the stringency of the 5th clause is modified by the proviso that where a person *has a legal right* to cause such matters to flow into a stream he shall not be subject to the penalties, if he proves to the satisfaction of the Court before whom he is tried that he has used the best practicable means to render such matter harmless. But such proviso is evidently useless for the protection of the mines. It may also be said that the magistrates are not compelled to inflict the full penalty, and may, if they please, make it nominal. But as all the penalties may be imposed by two magistrates in Petty Sessions, the prosperity and interests of valuable mines are thus made a mere question of two magistrates' caprice, and the miners exposed to constant litigation at the instance of any common informer, to whom a premium is offered as an inducement for the work.

The law, as it stands, sufficiently protects private rights and property from injury occasioned by mining, and the mines can be prosecuted notwithstanding: but now, in a *philo-piscine* fever, the Government determines to sacrifice one of the most important branches of industry of this or any other county for the sake of a few dozen fish. In Cornwall, "*fish, tin, and copper*" has been always the standing toast, but now it would seem we must limit the toast to "fish," and "*tin and copper*" must go to the wall. I trust it is not yet too late to call attention to this matter.

LOSS OF LIFE AMONGST CORNISH MINERS—No. VI.

The third report of Mr. John Simon, the medical officer of the Privy Council, which has recently been published by order of the House of Commons, contains important statements on the excessive mortality from diseases of the lungs in the mining districts of Penzance and Redruth, which, so far as they go, confirm and strengthen the much more conclusive proof we have already laid before our readers. The statistical evidence now given is neither so full nor so distinct as that we have already presented, as was, indeed, to be expected, for we derived ours from the highest living authority on vital statistics, Dr. Farr, of the General Register Office, having command also of the best existing means for ascertaining such facts. We shall not, therefore, take our readers over the same ground they have already passed to prove again what we have already proved more distinctly and decidedly, but rather solicit their attention to the general observations of Mr. Simon and of Dr. H. Greenhow, the result of whose local enquiry is appended to the report. Dr. Greenhow commences by showing what was already fully established—that there is a large excess of fatal lung disease in the two districts of Penzance and Redruth. He selected them for comparison because containing a large percentage of a mining population. From this fact he draws the natural conclusion that it is the great excess of such disease among the mining part of the population that causes the average excess of death rate from lung disease in the two districts, a fact we have already shown by direct evidence to be fully established. It is, however, satisfactory to find that other enquirers arrive at practically the same conclusions as ourselves, though the evidence on which they rely is not so complete as that we had previously examined; it must convince any not previously convinced (as all our readers must be) that there is great excess of fatal lung disease among Cornish miners.

It is reported very correctly that Cornish miners are naturally a fine, tall, well-grown race of men, but they are usually sallow and pale, and very subject to dyspepsia, as well as to the ailments which form the special subject of this paper. The habitual respiration by the miners of the close impure atmosphere of the mines during about a third part of the day produces bronchial irritation at an early age; at first, indeed it may be for some years, the irritation is so slight that the men scarcely regard it. Hoarseness and wheezing are among the earliest symptoms of miners' consumption, as the complaint is called, for which the men apply for relief to their medical attendants. This is locally called "a hisk." Sooner or later dyspnœa (difficulty of breathing) sets in, and is after a time attended with more or less of cough and expectoration. This expectoration arises from the irritation caused by soot or dust, and is either black or coloured, according to the predominance of wet or dust in the mine; sometimes it it is red or rusty, coloured from oxide of iron in the dust breathed.

Although some difference of opinion prevailed among the medical practitioners of the mining districts as to the precise nature of miners' consumption, they yet all agreed in saying that sooner or later nearly every person who works continuously in a mine for many years suffers from some pulmonary disease. The time of life at which the miners begin to suffer severely from their employment varies greatly, according to the character of the mines in which they work, the nature of their employment, and their personal habits and constitution; other things being equal, men who work in an ill-ventilated mine break down in health sooner than those who are employed in mines of a better kind. The tribute men, for the most part, suffer less severely, and later in life, than the tut men. The former are employed chiefly in getting ore, the latter in sinking shafts and driving new levels, where the ventilation is likely to be worse than in those completely opened or connected with others by winzes. Moreover, the tributers have more choice than the tut men, and can, and sometimes do, avoid places of very poor air.

Unless the progress of the disease be quickened by accidental circumstances, miners often go on pursuing their occupation for many years without sensible illness; they for the most part become more or less asthmatical about the age of 40, and but comparatively few are met with between the ages of 40 and 50 years whose health has not been unequivocably impaired. The state of health of 127 miners, taken indiscriminately at several different mines as they came up from work, was enquired into: 30 had passed their 50th birthday, not one-fourth of whom, according to their own statement, was free from shortness of breath, and the majority, though still able to work, were severely indisposed. Many of the younger men were also "touched in the wind," as they expressed it, for not less than 66 out of the 127 suffered, more or less, from dyspnœa, cough, or expectoration, and only 61 declared themselves to be in sound health, most of the latter being young men under 30.

It will be noticed that the result of this recent investigation exactly corresponds with the much more extensive one by Mr. Lanyon, quoted in our third article on this subject, and with Dr. Farr's table of the ages at which miners die, which was based upon still more extensive and precise data. But our readers will be better satisfied by knowing that every form of investigation brings out the same result; we trust, therefore, they will not consider the evidence above quoted of the most recent investigation, a needless repetition, for it is right that a subject of such vast importance should be examined from every point of view, and satisfactory to find that every examination points to the same result—that the great evil which exists is susceptible, if not of entire removal, of at least very important alleviation.

Dr. Greenhow, like most preceding enquirers, has arrived at the conclusion that bad ventilation of mines is one of the most powerful of the causes of lung disease amongst miners, involving, as it does, breathing air deficient in oxygen, and loaded with animal effluvia, powder-smoke, dust, and products of the imperfect combustion of candles. If there were any doubt of this being a correct opinion, it would be removed by the fact stated to Dr. Greenhow by some of the older medical practitioners, that miners' consumption is now more tardily developed than formerly, a circumstance, no doubt, ascribable to the great improvements which are said to have been effected in the ventilation and management of mines. These improvements consist chiefly in making the levels somewhat wider and higher than was formerly customary, and in greater attention in opening winzes to permit air to circulate, and though they fall very short of what the necessity of the case demands, they have done good so far as they go, and the result is encouraging for further progress in the same direction.

Though we quite agree with those who consider the bad ventilation of mines the chief cause of their unhealthiness, there are other causes also to which sufficient importance is not attached in Dr. Greenhow's report. Among these, the two of which the men most complain, and apparently with best reason, are the excessive toil of climbing many hundred feet of ladders, and that of "beating the borer," to make holes in the rock for blasting, in which so much of a miner's work consists. It is hard to believe, nor do we believe, that what is so very much complained of as these exhausting forms of toil produce so little injury to health as Dr. Greenhow represents, and we are fully convinced that, next after improved ventilation, relief from the toil of climbing ladders, which would not be difficult, and of beating the borer, which, though difficult, is not impossible, would be among the most important steps towards improving the health and prolonging the lives of miners.

We remark that Mr. Kershaw, M.P. for Stockport, on Tuesday last asked the Secretary of State for the Home Department whether he would object to recommend Her Majesty to issue her royal commission to inquire into the moral and sanitary state of the operative miners in Cornwall and Devon. Sir G. C. Lewis said he had already stated in general terms that he thought it desirable that a commission should be issued to enquire into the state of the miners in mineral mines, but the question was one mainly of time, and he should not wish to pledge himself as to the particular period when the commission should be issued. We trust that by this answer Sir G. C. Lewis intended to say that it is his intention to institute an enquiry soon, though not immediately, and that the Members who feel for the helpless will not allow such intention to be abandoned.

It is very natural that the representative of a manufacturing town, and himself a manufacturer, as Mr. Kershaw is, should desire to know why the Government abstain from even enquiring into the evils attending metal mining, when they have not hesitated actively to control labour in cotton mills, in printing and bleaching works, and in coal pits, against the strenuous opposition of the masters, but very greatly to their benefit, as well as to that of their men. We do not assert that the necessity for controlling metal mines is proved; we do not think it is, though many of our friends do not agree in that opinion, but no one truly can, or we believe does, deny that it is an urgent duty of a Government professing to have any function beyond those of to tax and to punish, to have a full investigation made into the causes of and appropriate remedies for evils which we have proved shorten the lives, destroy the health, and embitter the existence of multitudes of industrious and exemplary workmen.

FOREIGN MINING, AND THE NEW TARIFFS.

We propose, in consequence of the probably increasing commercial relations between this country and France, to devote some space to mining affairs in that empire and the countries which border upon it. The recently-concluded treaty of commerce, if allowed a *bona fide* and continuous development, cannot fail to give a stimulus to our intercourse with our neighbours, to render them more English, and to indoctrinate us more with foreign ideas and objects. Moreover, there has been of late a great commercial movement in France, especially in the South, and the sedulously cherished aim of the Government of the Emperor Napoleon has been to develope the resources of his extensive territories, and to follow closely in the wake of England both by sea and land. The French generally see little to admire in England, except its vast commerce and mechanical skill—its *beezness*, as they would probably say. But once convinced of the importance of this, they are now thoroughly in earnest in seeing what they can do to effect a little more *beezness* too; so on all sides they are prosecuting mining operations with increased vigour, making more railways, and establishing more steam lines. The English, on their side, must not shut their eyes to this new development on the part of their volatile neighbours, but must endeavour to watch its progress and profit by its lessons. It is with this object that in our own particular department we aim at a collection of facts, arguments, and assertions likely to be of more or less interest to the mining world.

As regards the coal trade on the northern coast of France, it appears that the local mining companies are vigorously endeavouring to meet English competition. The Treaty of Commerce reduced the duty payable on English coals to 1 fr. 80c. per ton on their arrival in France; but the French are resolved that the consumption of coal on their coasts shall not be considered as dependent wholly for its supplies on English producers. Since the signature of the Treaty of Commerce (as indeed before it) the greater part of the coal mining companies of the Pas-de-Calais have dispatched daily to Calais and Dunkirk coal which costs less to consumers than that which they can obtain from England. This is not all one company; the Société de Vendin-lès-Béthune was embarking early this month at Dunkirk 4000 hectolitres for Havre and 5000 hectolitres for Caen of coal specially adapted for dressing lime and bricks; and taking into account the quantity consumed annually in Normandy for this purpose, it is expected that the company will find an opening in the district for 100,000 hectolitres of the special quality of coal which it can supply. Again, since the completion of the line of railway from Rodez to Montauban coal from Aveyron arrives at Bordeaux in competition with English coal, and is expected to become "master of the market." "On the whole, then," says a writer of some observations written specially for French eyes, "there is no ground for fearing that the great and economical reform of 1860 will prove fatal to any one." It is cheering to find that some French coalowners have regained their natural self-complacency, and are perfectly satisfied that they can hold their own against those ogres—those *bêtes noires*—the English; but if we may judge from the report recently presented to the shareholders in the Compagnie des Mines de la Grand'-Combe, Frenchmen sometimes prey upon each other to no slight extent. The *conseil* of the Grand'-Combe stated that the consumption of their market is continually increasing. When, at the commencement of its operations, the company had to struggle for an important position in the market of Marseilles the cost might readily be anticipated. It had been, and would be, the same for other adventurers, unless they contented themselves with a progressive extension of their openings, for every excessive development cost those who engaged in it too dearly. The effect of an over-hasty or unmeasured development for a working was an inevitable increase of wages beyond the fair standard, an increase which could not fail to result in a reaction in a contrary sense, and a consequent demoralisation of the working population. From the side of the consumers the position was yet more grave, for he who sought to make himself too large a place upon the market could only obtain it by excessive sacrifices. He was obliged to descend 10, 15, or 20 per cent. in his price, the entire market was troubled, and although an advantage might appear at first sight to result to consumers it was only a temporary one, since adventurers could not always sell below a return price. "Yet," proceeded the *conseil*, "in the commencement of last September the administration of one of the workings of our basin, not content with having made successive and excessive reductions in prices (even below a return price), announced in circulars addressed to the principal consumers, that not wanting, like rival companies, to make exorbitant profits, they had determined, without compromising their revenues, not only to make a further considerable reduction in their charges, but also to allow clients at Marseilles, with whom they had anterior agreements, to profit by the abatement. The company was in the habit of selling its coals to the consumers, to whom they addressed their circulars, at 22 fr. to 23 fr. per ton, and it reduced them to 18 fr. 50c., the result being that the coal companies which the Besseges Railway serves decided on following the example. The reduced price appeared to us absolutely unacceptable, and, although some of our clients with whom we had had dealings for many years demanded that we should also submit to it, we had too good reasons to agree to do so, since the coal companies of the department of the Gard had better not produce coals at all than sell at such a rate. For those companies which use the Bességes Railway in selling a ton of coals in the Marseilles Docks must first deduct from the price which they receive 8 fr. 60c. for carriage on the Mediterranean Railway, 4 fr. 10c. for carriage on the Bességes Railway, and 2 fr. 20c. for sundry expenses at Marseilles, leaving them only 3 fr. 50c. per ton for the coal; and we ask can a coal company resign itself profitably to such a price? We should consider the demand addressed to us as worthy of our most serious consideration, the more so since the Treaty of Commerce with England may possibly vexatiously affect the situation of many of our consumers; but we should touch the limits of our price, and we should not be able, without the highest imprudence, to follow a competition so unfortunately undertaken." The *conseil* proceeded to argue—and it is curious to contrast the language held in the South of Franch with that put forward in the North on the same subject, and reproduced above (the more so seeing that England is much more distant from the South than from the North)—that consumers themselves must recognise the fact that, whatever might be the difficulties of the situation which the Treaty of Commerce with England had created for them, they could not reasonably expect to meet them by demanding of the coal mining interest sacrifices which it was quite unable to make. When coal arrived at Marseilles, having cost a round sum of 22 fr. per ton—7 fr. to 8 fr. return price of the coal as placed upon the wagons, 12 fr. for railway transport, and 2 fr. for incidental expenses—it was neither in the return price or the small charges that a reduction could be sought for, for even if any could be effected the amount would be imperceptible. The sole article reducible was the charge for railway transport, which amounted to three-fifths of the whole price of coal, and which had been fixed by the Government in establishing the conditions of railway existence. In granting the companies excessively remunerative tariffs, the Government had pushed to the extreme the system of protection to the national industry which it was the object of the Treaty of Commerce to reverse. When Marseilles industries were protected against foreign industries they could admit without dispute that the protection of railway industries justified a charge exceeding the amount which the trans-

port of commodities really cost; but now that the protective system was completely abandoned by the Government, and the coal-consuming industry of France was placed almost without protection in presence of English industry, it had a right to ask the Government if it was just that it should pay for coal, in the shape of a high tariff, a special charge to which the English coal consumer was not in any way subject? The coal supply of Marseilles traverses 200 to 300 kilometres of railway, and pays for carriage 12 fr. or 13 fr., or more than double the transport costs the companies which execute it; and the *conseil* asked, is this situation compatible with the new situation which the Treaty of Commerce has imposed on French industry?

It is to be feared that our readers will set this down as a "roundabout paper;" at any rate, we have got round from the North to the South of France hardly before we knew where we were. But one or two observations must be made upon the arguments which our French friends urge in regard to what appears to be a very absorbing subject among them—the Treaty of Commerce. The Northern view of the matter seems the most cheery of the two; and the Southern appeal, *ad misericordiam*, shows the difficulties which surround all efforts to return from a false to a sound system of political economy. The French have looked too much to *octrois* and concessions, and governmental measures of all kinds; like their social life, their commercial system has been too artificial, and when any attempt is made to recur to a state of nature loud and piteous are the cries on all sides. The *régime protecteur* still deludes the French mind, as protection once deluded the English, and the lingering belief is that since one interest is "protected" every other must be. What more opposed to right principles than for a Government to fix the price which a railway company shall charge for carriage, instead of leaving the matter open for the free and unfettered consideration of capitalists? It is clear, as the *conseil* of the Grand'-Combe argue, that if France is to adopt free trade externally she must do so internally also; otherwise she will be no match for the ever-dreaded English, who, "varnished barbarians" as they may be to sensitive Parisian fastidiousness, have shown a far better comprehension of the common affairs of life.

The Chamber of Commere of Liege has just issued its annual report on the coal and metallurgical industry of that town and district for the year 1860. During that period the Chamber states that the unfavourable circumstances which prejudicially affected industry generally, and the fabrication of metals particularly, were an obstacle to the development of the coal production of the province of Liege, which, while it amounted to 1,925,358 tons in 1859, fell in 1860 to 1,895,507 tons; the number of workpeople employed being 17,088. The rate of wages remained without change, but the sale prices of all kinds of coals were a little below those paid in 1859, and 1860 consequently presented a certain diminution in the profits of collieries. During the greater part of the year the sale was feeble; interior consumption and foreign demand did not call for an increased production, and in order not to encumber magazines the managements were under the necessity of reducing the extraction. The collieries of the province of Liege suffer day by day more from the competion of the basin of Charleroi and the mines of Westphalia. Fourteen blast-furnaces were in activity in the province during 1860, and were served by 1548 workmen and 32 steam-engines, of 1280-horse power. The production of the year was 99,503 tons, of the value of 7,763,000 fr., as compared with 103,720 tons, of the value of 8,378,000 frs. in 1859, showing a reduction of one in the number of furnaces in operation, 4220 tons in the production, and 615,000 fr. in its value. or 2 fr. 50 c. per ton. The quantity in stock at the end of the year 1860 was larger than in 1859, and exceeded one-third of a year's production. The production of the iron-works amounted in 1860 to 53,603 tons, of the value of 10,656,000 fr., as compared with 41,188 tons, of the value of 8,845,000 fr. in 1859, showing an augmentation of 12,415 tons, and an additional value of 1,181,000 fr. A slight fall in price, although the demand was actively maintained, was submitted to in 1860 in the iron trade, but the price of rails remained the same as in 1859. We shall probably refer again to the report prepared by the Chamber.

NORTHERN INSTITUTE OF MINING ENGINEERS.

The success of the late meeting of this Institute at Birmingham is now an established fact. The interest shown by all classes of persons connected with mines, and the number and character of the papers read, models and plans shown, sufficiently prove that the idea of holding a central meeting was a sound and wise one. As one of the results of this central meeting, we should not consider it at all improbable that some arrangement may be come to which would much extend the usefulness of the Institute, either by the arrangement of migratory meetings periodically, or the establishment of a branch society in the Midland or Southern districts. The first paper read at the meeting was by Mr. SAMUEL BAILEY. The title does not give a complete idea of the contents and scope of the paper, for although it only professes to treat of "Underground Engines," it refers to and treats of the whole system of coal mining in South Staffordshire, and that in a very clear and lucid manner. The object of the paper is to urge upon the mine managers of the district referred to the adoption of modes of working on a much more extended scale than that hitherto pursued; the object being to increase the output from 60 or 70 tons per day to 250 or 300 tons per day, that is from one winning or plant, the direct effect of which will be a very great reduction in the cost of getting the coal to surface. The views of the writer appear to be sound and practical; but in carrying them out a knowledge of the various departments of mining will be found to be indispensable. Improved winding machinery, and the application of underground engines, will require more extensive workings, and also improved modes of ventilation; the whole colliery, indeed, both above and below, will have to be entirely remodelled. We make these remarks not with a view of disparaging the views of the writer of the paper—on the contrary, we cordially agree with every word he says—but merely for the purpose of showing that it will be necessary to take a comprehensive view of the subject, as the adoption of underground engines will necessitate other arrangements to meet the case of extended workings and increased quantity. The adequate ventilation in proportion to those altered circumstances should especially be attended to, as otherwise (if much gas is produced) the results might prove disastrous. From the account given by Mr. Bailey, it is quite clear that the South Staffordshire coal district is in a state precisely similar to the position of the Northumberland and Durham coal field 60 or 70 years ago. Great advances have been made since that period, and the quantity produced from one plant increased in some instances five or sixfold; but it is possible to carry even this too far, and have too small a number of shafts. Looking at this with regard to the two main objects to be kept in view—that is, safety and economy—a medium establishment will often be found to be the best. It would not be difficult to find fault with many of the establishments in the North in this respect; however, it may be presumed that this error will not be committed in South Staffordshire for some years to come.

The next paper read was by Mr. T. Y. HALL, on the "Northern Coal Field." The objects of this paper have been already well indicated in the *Mining Journal*. It is of a general and comprehensive character, and so well worthy careful perusal that its correct appearance in the "Transactions" will be awaited by many. The *Newcastle Chronicle* has already published it; and adds, that Mr. Hall stated, on good authority, that the present production of coal raised in the counties of Durham and Northumberland, or the great Northern coal field, is equal to 22,500,000 tons yearly, and that the capital may now be taken at 35,000,000*l*. On Dec. 6, 1854, a paper was read by Mr. Hall to the North of England Mining Institute, "On the Austrian and other Continental Coal Fields," where the quantity produced was stated to be at the time about 16,000,000 tons per annum. [See vol. 4 of the "Transactions of the Institute."] This may have been an under estimate of the produce at that time, the annual value of which was stated to be, at the then prices of coal for local consumption, and shipment for London and elsewhere, 13,000,000*l*. yearly. The present prices are much the same as at that period, consequently the present value of coal to consumers at the same rates as in 1854 amounts to 18,000,000*l*. per annum. This quantity is more than one-fourth of the whole consumption of Great Britain. France consumes about 15,000,000 tons yearly, one-half of which has to be sent from England and other foreign countries.

The next paper read was by Mr. AYTOUN, of Edinburgh. This is a subject of the greatest importance, and one deserving, we are inclined to think, much more attention than it has as yet received. At the same time, we are bound to say that it appears to be one surrounded with difficulties. It appears to be most desirable that an apparatus should be attached to every cage used for the purpose of winding men up a shaft which shall in the event of the rope breaking prevent the descent of such cage, and also an apparatus for the purpose of detaching and suspending the cage in a case of over-winding. This, we say, appears to be highly desirable, and, indeed, necessary, so as to ensure perfect safety in our numerous coal shafts. Theoretically, too, it would appear at first sight that this would not be a task presenting any insuperable difficulties; but, practically, we fear this has actually been the case. At any rate, the usual practice of engineers (we allude more particularly to the counties of Northumberland and Durham) to depend entirely upon good engines, good materials, and constant inspection and supervision, and it must be conceded that their efforts have been attended with very great, if not complete, success, for in the district named over-winding is almost entirely unknown, and very few accidents, if any, occur from the breakage of ropes. The shaft accidents are, we believe, confined to those caused by mistakes at the top or bottom of shafts, or at seams in the shafts. But we will not speak positively on this point, although we do not at present call to mind any cases of accident from the breakage of ropes or over-winding of recent occurrence. We observe that in the year 1859 the number of shaft accidents in Northumberland and Durham was 25, and in 1860 the number was 21; but it must be observed that it is not specified what number of those accidents occurred at the top and bottom of shafts, and other stopping places, and over those the safety-cage apparatus will have no control. It is only in cases of breakage of ropes, or over-winding, that this apparatus can exercise any control; this distinction appears to be important, and no doubt the Government Inspectors could furnish this information. Mr. Aytoun states truly that the deaths from shaft accidents in 1860 were 182 (our copy gives the number as 157); but a serious mistake is made when he assumes that his apparatus will affect the whole of those accidents. It is clear that mistaken signals, from the bottom or other stopping places in the shaft, cause by far the greater number of accidents in shafts, and over those Mr. Aytoun's apparatus can exercise no control. But still it will be admitted that a considerable number of accidents do occur in some of the districts from the breakage of ropes and from over-winding; cases of the latter sort appear, indeed, to be but too common in the southern districts. We were concerned a few years ago in the application of a safety apparatus to a deep shaft (Fourdrinier's, we think it was), and the difficulties met with were precisely what are described so ably by Mr. Aytoun. The puzzle appeared to be how to adjust the springs so as to take sufficient hold in case of breakage, on the one hand, and to prevent the apparatus taking hold of and damaging the slides in the ordinary course of working, on the other; and, after a pretty long trial, the apparatus was ultimately abandoned, on account of continual damage to the slides, in spite of all care being taken. Those objections, the writer states, he has overcome, and we only sincerely hope that he has done so, as we wish him every success; and there can be little doubt that his paper will be thoroughly discussed, and the merits of his invention fully tested, and if found practically useful and effective more extended adoption of it may be confidently predicted.

One of the most interesting and useful subjects noticed at the meeting is the Ventilation Register, of which a minute account is given in the paper of Mr. WOODHOUSE. This appears to be a most admirable instrument, and calculated to increase very much the safety of collieries if generally adopted; it is especially suitable for large collieries, where the ventilation is on an extensive scale, as there it is of the utmost consequence that the ventilation be kept at a steady and constant rate, and this instrument appears to be admirably adapted to effect this, as well as to give timely notice of any change in the quantity of air caused by falls or obstructions in the air-courses, or from other causes. It also appears to be well calculated to act as a spur on the furnace-men, ventilator, &c.; and, lastly, it affords the means of having a complete register of the ventilation of the mine, which must prove of the greatest advantage. There can be little doubt that this instrument will come into more general use now that its properties are known and understood. Similar contrivances have, indeed, been in use at some of our collieries for a number of years, but none, so far as we are aware, are at all to be compared to this for accuracy and real utility. They are, indeed, generally of a rude description, and of little practical use—that is, the instruments of the kind generally met with.

The paper of Mr. GEORGE FOWLER, relative to the "Working of the Main Seam at Moira, particularly with reference to Spontaneous Combustion," contains some points of interest. The subject of spontaneous combustion, indeed, does not possess a very general interest, as its occurrence in mines is confined to a very limited area. But all collieries are liable to fires from ignited gas, engine-flues, &c., and the question of which is the best mode of extinguishing those fires is one of very great importance. When a fire does take place underground, supposing it to be in an open bord, or other working, the most common mode appears to be to shut the place off by means of brick walls, mortar, &c.; but this plan appears to be attended with much danger, and frequent accidents occur. It appears, indeed, very difficult to close a working underground hermetically, so as to prevent the access of atmospheric air. The plan described by Mr. Fowler appears to be effective—that is, by putting in a dam of clay, but the pressure of the roof and stull is necessary to complete the closing that is to prevent spontaneous combustion. But when a fire does occur, the opinion prevailed at the meeting that the best mode of extinguishing it is to shovel the material out; this opinion will, perhaps, apply to nearly all cases, either the burning material ought to be got out, or water applied to extinguish the fire, and if the working is situated to the dip it can easily be filled with water; at any rate, it would appear, from numerous cases, that the closing up with bricks, mortar, &c., is attended with much danger, and very uncertain in its results.

The paper of Messrs. ATKINSON and DAGLISH, on the "Friction of Anemometers," will prove of great service and use to the members of the trade. The velocity of the air in mines is a subject of the first importance, and the possession of the means of accurately determining this has long been a desideratum. That the experiments and writings of those gentlemen will materially tend to this result there cannot be any doubt. The means now resorted to are often rude, and the statements made as to the quantity of air little to be depended upon. "A number of experiments have been made by the writers of the paper, so as to show the defects of the existing anemometers, and to ascertain the necessary corrections, in order to obtain more accurate results, to show which they have worked out a large number of formula applicable to the instruments under consideration." This was very much wanted, as without corrections the best anemometers give very uncertain results. This is easily tested by measuring the whole quantity of air in a mine in a situation where there occurs the *least area* in the mine, and consequently a high velocity; and again with the same instrument measure the quantity where occurs the *largest area*, and, of course, much less velocity; and again measure the quantities in the various splits or divisions of the air. It will be found that great discrepancies exist in the results. We expect, therefore, that the labours of Messrs. Atkinson and Daglish will have this result—the best kind of anemometer will be clearly pointed out, and the necessary correction to be applied clearly shown, so that in using them the results will show pretty correctly what the real quantity of air is.

Among the plans and models exhibited was one of Mr. WILLIAMS's, of Blaenavon, of an apparatus "For Extracting the Gas from Mines." The plans of amateurs, brought forward for the purpose of ventilating mines, extracting gas from them, &c., are generally passed over by practical men without notice or comment. This is too generally attributed to prejudice or caprice. It is forgotten that practical men can see at a glance what may prove useful, and also detect as quickly what is useless or impracticable. We do not hesitate to state our opinion that this scheme of Mr. Williams's will belong to the latter class. It is strange that those who propose to use pipes for the ventilation of mines, and kindred purposes, do not see more clearly the real state of the case. Let us for a moment consider the subject. Take a coal mine with two distinct shafts sunk from the surface to the vein of coal. Now, whatever the size or depth of those shafts, what are they but *two pipes*, which may be used, and are used, for the conveyance of air to and from the workings. And as the larger the area of any air-passage is the greater quantity of air can be conveyed through them, with a given amount of power, what are we to think of a proposal to place a *smaller pipe* inside a large one for the express purpose of effecting what is done with the latter? And now let us look at the galleries, passages, main roads, or whatever name they may get in the mine: they also are only *large pipes*, when shut off and isolated as they are by means of doors and stoppings, for the purpose of ventilation. It will certainly be clear to everyone that whatever can be done with pipes can also be done with the passages or galleries in a coal mine; with this advantage, that the latter are very much larger than any pipes that can be inserted; and this advantage is very great, when the laws which govern the passage of air are taken into account. What, then, can be advanced in favour of employing pipes or tubes for the purpose of conveying air into coal mines, or extracting gas from them?

The proposal lately made to ventilate mines by means of pipes, on the same principle as that in which gas is supplied to towns and houses, appears to be very plausible at *first sight*, but a little consideration will show its utter inadequacy for the purpose. The advantages offered are—one shaft is sufficient, this to be an *upcast*, the downcast air being taken down the pipes and supplied to each working place as required, thus dispensing entirely with doors and stoppings. This appears simple enough; but, what quantity of air will be got by this means, and at what cost? But if we throw the latter consideration out of the account at present, and confine ourselves to the former, we shall see what the idea is worth. We will suppose that the area of the passages in the mine is 36 ft., and that 10,000 cubic feet of air per minute is necessary to keep the works clear of gas, and that this quantity is passing. That is, passed in one current through the whole of the workings—this being a simple case of *commencing* a colliery, now the pipe is inserted, what must be the dimensions of this pipe? It is clear that the pipe must be of the same size as the *mine gallery*, to *get the same quantity of air circulated* with the same power. But if the pipe is to be, say, 1 foot in diameter, or even 2 feet in diameter, only a small fraction of the original quantity of air would be got, and if the mine produced much gas only sufficient air would be circulated to render the whole area of workings in a highly explosive state. We have, perhaps, said enough to show the fallacy of the pipe idea—that is, to non-practical men; to practical men all this is unnecessary. Now, the plan proposed by Mr. Williams does not differ much from this. Again, we say that whatever can be done with pipes can also be done with galleries, whether it be ventilation, drainage of gases, or what not. All galleries, indeed, may be considered as merely so many pipes, whether they be horizontal, vertical, or sloping at whatever angle; and mines can be thoroughly ventilated by those means, and goafs and workings can be drained of gas, &c.—that is, taking any particular case by itself, all this can be effected, as the properties of air and of the various gases met with in mines are pretty well understood: and whatever defects exist in the modes of ventilation as actually applied or carried out in any particular case, there appears to be no possibility of applying a remedy by any system of pipes. Yet this has been a favourite idea with many; even the great Faraday proposed to apply pipes for the drainage of the gas from the goafs at the Haswell Colliery, the idea escaping him that whatever drift, pit, or passage the pipes were placed in, would itself form a larger and better escape for the gas.

At the conclusion of this most successful meeting several papers were left over for reading at future meetings. Some of these papers are on most interesting subjects; the whole of them, indeed, are important, as the titles will show. Messrs. Daglish and Atkinson's papers, on "Shaft Tubbing" will be looked for with much interest, and Mr. Blackwell's paper on "Ventilating Machines" opens out a subject which must attract much attention and prove highly instructive. If those machines, when fully tried, should prove more powerful and effective than the furnace, they will undoubtedly come into more extensive use; but more information is wanted on this subject, which this paper will most likely supply. The paper of Mr. Wood treats of a very curious geological feature of the coal strata of the county of Durham, and cannot fail of being highly appreciated.

[*To be continued in next week's Mining Journal.*]

REPORT FROM NORTHUMBERLAND AND DURHAM.

JULY 25.—The Coal and Iron Trades here continue in a sluggish state. In the Cleveland district considerable quantities of iron continue to be shipped, but the prices received are far from being good. Considerable anxiety is felt here respecting the issue of the present proceedings with regard to the Consett Iron Company, and their relations to the ill-fated District Bank. The subject is to come before the Vice-Chancellor on Friday when it is hoped that some arrangement will be come to. It is hoped that time will be allowed them for the payment of the mortgages now or shortly to be due. Should their works be stopped from any cause it would be a great calamity for the district. There can be little doubt that the Iron Company will do everthing in their power to carry on the works, and meet the claims against them. They have met with very adverse circumstances since the commencement of their undertaking, the state of the iron trade having been extremely unfavourable, and this consideration ought to influence their creditors, and induce them to act with forbearance. A consideration of these circumstances of the case, indeed, makes it evident that the interest of both parties can only be secured by the present company keeping the works going, if this be at all possible. The state of the commercial treaties between this country and France and Belgium has also attracted much attention here of late. The duties levied on British coal imported into those countries operate most unfavourably on the trade: some change in these duties appears to be urgently required, and much exertion is now being made for the purpose of bringing this to pass.

A coroner's inquest was held at Monkwearmouth, on the body of J. Fowler, aged 21, killed by the explosion noticed last week. Mr. Dunn, the Government Inspector of Mines, was present. John Spence, underviewer, said the explosion occurred in a stow-bord in the south-west district of the Hutton seam, where deceased had commenced work. Along the rolley-way into this place about 2000 cubic feet of air was passing per minute. Deceased had been burnt, but had been killed by the after-damp. He had been running away. He had a Davy lamp, and it was now in the same state as before, and quite perfect; it was locked, and was found lying on its side. There were no candles at the place, and deceased did not smoke. He had evidently never got his lamp hung up. Two hours after the explosion witness examined the place, and found a little gas, but nothing to be dangerous; it would have fired then at a candle, but not at a lamp. The place was examined on the Monday morning by the deputy, John Adamson. James Richardson said he was at work in the red stow-bord, and saw the fire come from the direction of deceased's place. The force of the air knocked witness over, and the fire passed over him. There was no want of ventilation, and no complaint about the place. It was examined by William Patterson before they went into work, and considered perfectly safe. His opinion was that deceased's lamp had taken fire, and that instead of putting it out he had attempted to run away with it. Two men, named Boyd and Wilson, deposed as to the finding of the body, and Spence gave additional evidence as to the lamp produced, which was cleaned, opened, and examined, and was found to be quite perfect. The jury returned a verdict in these words—"That the air inside the lamp fired, and that by a strong jerk, or attempt to blow it out, the flame came through the gauze, fired the gas, and so occasioned deceased's death. They recommend that in future the colliery owners be very particular in ascertaining that the men understand the use of lamps placed in their hands when they go into dangerous places." It will be seen that the gas is supposed to have passed through the gauze of the Davy lamp—a very extraordinary and serious circumstance certainly, if correct, but we apprehend that few practical pitmen will be inclined to admit such a conclusion. It is believed by practical men that it is a very difficult matter indeed to force the gas through a Davy lamp gauze.—A most extraordinary explosion of gas occurred at an old shaft near Benton, Newcastle, on Friday night last. Four mischievous boys lowered a lighted candle down the shaft, and an explosion of a frightful character ensued, blowing some old timbers out of the shaft a great height into the air, and one of the boys was also blown into the air, and his death shortly ensued. Such is the result of their mad frolic—his age was eleven years; the other boys were thrown down, but not much injured. The securing, fencing, and closing of shafts is of great importance, but very seldom attended to.

In consequence of the dull state of the chemical trade, and the large stocks on hand, one of the chief makers has this week reduced his prices. The present rates are,—best alkali 2*l*., and for second 1½*l*. per cent.; crystals of soda, 4*l*. in export, and 4*l*. 5*s*. per ton in assorted casks; bleaching powder, 8*l*. 5*s*.; Epsom salts, 7*l*. 5*s*.; and bi-carbonate of soda, 12*l*. 10*s*. per ton. There was a decrease in the exportation of coal, coke, and iron from the Tyne last week, but an increase in the shipment of alkali, arising from the low price of that article.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

JULY 25.—There has been a somewhat better demand for manufactured iron during the week, though the trade is exceedingly depressed. The reduction in the price of iron has had the effect of bringing into the market several large orders which were held in abeyance, but we cannot hope for a better trade until the war crisis in America is settled, or until affairs have assumed a more conciliatory tone. There is an entire absence of speculative purchases, and the orders in hand are merely for home requirements. There has been a considerable degree of firmness manifested in the demand for Scotch pig-iron, and Derbyshire makes have realised fully late rates.

The Coal Trade is rather dull, and a degree of depression prevails throughout those counties, owing to the stagnated position of the manufacturing industries of the country. In the smaller collieries the men are only making part time, and in the principal works there is great difficulty in finding full employment for all colliers. The export demand, which was expected to yield much, has not realised the anticipations which were entertained of it by its most sanguine promoters. The demand for hard coal is very active, more especially for the requirements of our railways, which receive the Derbyshire hards as largely as they can be produced, on account of the excellence of its quality. There is also an active enquiry for the deep coal from Lancashire for coaling our steamers.

During the present week the operations at Clay Cross have been pushed forward with unabated energy, and the men have been engaged in getting out the remaining portion of the horses. The falls of roof have been numerous, and considerable time and expense will have yet to be incurred before the pit can be again put in working condition. The last of the unfortunate men has been recovered, and the pit is being surveyed by Mr. Hedley, the Government Inspector, and by other scientific gentlemen, preparatory to the inquest, which will be held on Thursday, when it is expected that the enquiry will be closed. An inquest on the last of the remaining bodies was held this day, and the body having been identified the proceedings were adjourned.

An accident has occurred at the Mill Dam Mine this week, which has resulted in the loss of a miner. The man was ascending the pit, when he fell a distance of several yards, and was killed.

Speculation in all description of mines is very flat, owing to the depression in trade generally, and it is not anticipated that a better result will be attained until American affairs are more pacific, and commerce between the States and England is again restored.

The Mill Dam Company have made a call of 5*s*. per share upon the present shares, and this is regarded by many shareholders with great astonishment, considering that so much money has been received from the sale of ore.

The directors of the North Derbyshire Mine are very confident in the prospects of their mine. The sinking of the new shaft is proceeding very satisfactorily, and there appears to be a confident belief that when the vein is reached the company will have one of the richest mines in Derbyshire.

The Mill Town Mining Company have sunk down 27 fathoms in the toad-stone, and

they are not yet through it, but they expect to be through every fathom shortly. The new issue of shares has been taken up only to a moderate extent by the present shareholders, and unless something is done to raise further capital the company will either have to abandon the work or to make another call.

REPORT FROM MONMOUTH AND SOUTH WALES.

NEWPORT, CARDIFF, AND SWANSEA, JULY 25.—The different railway bills now in Parliament connected with this district have nearly all become law, and new lines will soon be constructed so as to afford every facility for the development of the immense coal and iron mines which are to be found under the hills and dales of Wales. On Friday the Lords' Committee declared the preamble of the Llanelly Railway and Dock Company's Extension to Swansea proved, clauses being at the same time inserted for the protection of the Duke of Beaufort, the South Wales Railway, and the Oystermouth Tramroad Company. On the same day, the Lords' Committee declared the preamble of the Swansea and Neath Railway bill proved. The opposition on the part of the Swansea Vale Railway Company was withdrawn, clauses having been agreed on between the two companies. The opposition was, consequently, confined to the South Wales Railway Company and the Duke of Beaufort, but the committee overruled their objections, and passed the clauses. The increase of trade on the Vale of Neath Railway for the present year is something very remarkable, and if a proportionate increase will continue to take place for the next two or three years the line will be one of the best paying in the kingdom. The traffic return for the week ending July 14 was as follows:—Merchandise and mineral traffic, 170*l*. 4s. 4d.; passenger, 31*l*. 16s. 8d.: total, 201*l*. 1s. Corresponding week last year—Merchandise and mineral traffic, 126*l*. 5s. 3d.; passenger, 30*l*. 2s. 4d.: total, 157*l*. 7s. 7d. This shows an increase of 44*l*. 13s. 5d. compared with the corresponding week last year, which must be exceedingly encouraging to the shareholders, who have as yet received but small dividends from their property.

Several accidents have occurred during the last few days. On Saturday David Davies, a carpenter, was accidentally killed whilst engaged in repairing No. 9 engine at the Abernant Works. The unfortunate man has left a left a widow and several children to mourn his loss.—On Monday Mr. John Davies, the foreman of Messrs. Nevill and Co., blocklayers, at Llanelly, met with a frightful accident under the following strange circumstances:—He was coming down on the engine to the copper works docks, when he perceived a woman with a child and donkey on the road. Seeing their danger, he ran in front of the engine, which was going rather slow at the time, and got the woman off the line. Unfortunately for himself, however, the engine struck him, throwing him down across the line, and six of the loaded trams passed over both his legs. He was immediately conveyed to the Castle Hotel, Llanelly, where he received every attention from the medical gentlemen present. Both legs were broken and dreadfully smashed, and the surgeons decided on amputating the right leg. Mr. Davies is, as yet, in a very precarious condition.

Trade generally continues inactive throughout the whole district. At Swansea matters are in a hopeful condition, and great expectations are formed of the various railway schemes now in progress which are intended to have Swansea as their terminus. Every department of the Aberdare Ironworks is fast recovering from the effects of the late strike, and the coal pits of the valley are fully employed. Rumours have been circulated during the past few weeks that a neighbouring coal proprietor had bought the Herwain Works from Mr. Crawshay, but the report turns out to be entirely incorrect. Hopes are entertained that Mr. Crawshay will get a second lease of the property, and that the works will soon start again.

The reduction proposed to be made in the price for cutting coal has been resisted by the men at several places, and hundreds are now out on strike. At Garndiffarth and Vartey a few have gone in at the reduced prices, but the great majority of the colliers still stand out. The masters allege that in consequence of the stoppage of several ironworks more coal is brought to the market, and the competition, as a matter of course, considerably increases. The men, on the other hand, insist that their prices should not be regulated by the ironworks. At Risca matters remain about the same, except that a little further light has been thrown on the cause of the dispute. The men up to the strike received 2s. 3d. per ton for cutting the coal, timbering, &c. Mr. Palmer, the present manager, wished to introduce the North of England system of employing subfiremen for the purpose of timbering and bratticing; and in order to do this he proposed to reduce the colliers' prices 6d. per ton. The men objected to the proposed new regulations with such a large reduction, and they refused to work. On Tuesday Mr. John Russell and Mr. Ladwick Rees had a meeting with the men, but as yet no satisfactory arrangement has been made. The men complain that they only received five days' notice of the reduction, and they assert that trams are so scarce that they can do three times the timbering necessary during their leisure time.

A meeting of the Risca Relief Fund Committee was held at the Town Hall, Newport, on Wednesday last. The Rev. Howell Williams occupied the chair, and there were also present Messrs. L. Brough, Government Inspector of Mines; T. W. Plum, Blaenavon; David Morris, Risca, and one or two other gentlemen. The meeting was called for the purpose of examining the accounts and deciding as to the future distribution of the fund. In consequence of the absence of Lord Tredegar and Sir Thomas Phillips, it was determined to adjourn the meeting until Tuesday, the 20th day of August next.

There is but little new to report in reference to the shipping of the three ports. The exports of Swansea (coal excepted) for the first five months of the present year show a considerable falling off compared with the same period for 1859 and 1860. This is easily accounted for in the general depression which prevails. The Cardiff docks are well filled with vessels, but business is stagnant, and there is every likelihood of its continuing so for some time. The coal trade is an exception to the general rule, the shipments being gradually increasing. At Newport the wharves are busier than has been the case for some time. To-day there are not half-a-dozen wharves unoccupied on the whole river. There is also a good number of ships in the old and new dock. The *Empire State*, of New York, is now loading, and will leave in a tide or two with 1800 tons of railway iron for Genoa. The Blaina and Ebbw Vale Companies are loading several smaller vessels for different parts in the Mediterranean. Upon the whole, business has manifestly improved in Newport during the last three or four weeks, and it is to be hoped that this is only the prelude of better times along the Welsh coast from Milford Haven to Gloucester.

COAL MINE INSPECTION.

THE SOUTH-WESTERN DISTRICT.—Since the introduction of Governmental inspection but one accident—the explosion at Lundhill—has occurred equal in extent to the fearful calamity at Risca, and the minute details which Mr. Lionel Brough gives in his annual report invests that document with the greatest interest. Mr. Brough remarks that, as already explained in his evidence, the ventilating medium at the Black Vein Pit was not the furnace method, now so thoroughly understood, and so appropriately and justly employed, in nearly all the best managed coal mines in Great Britain, but a Struvé's aërometer, which is, in fact, nothing more or less than a gigantic air-pump, whose capabilities is simply proportionate to its internal diameter, to the extent of travel to the pistons, and to the number of strokes effected in any given unit of time. "There is no question," he continues, "that as long as all the parts hold good, and the numerous valves fit close and open freely, that an extraordinary amount of exhaustion can be arrived at with these remarkable machines; in proof whereof, I may instance the mine that is the present subject of this memoir as a case in point; for, taking into consideration the superficial area or extent of fresh face exposed, and also the quantity of coal daily excavated, I hardly know of a panel of work, either in this or in any other colliery, that receives a larger or fresher proportion of air than that very part where the gas fired, and caused such lamentable mortality. At the time I was of opinion, and do now also entertain the belief, that the quantity of air passing through the No. 3 cross-heading and its corresponding group of stalls was, under ordinary circumstances, sufficient to comply with the first general or Government rule in the then existing Act of Parliament. The greater the volume of air the quicker, of course, will an outburst of gas be diluted and swept harmlessly away. But, as I have already stated in evidence, 200,000 cubic feet per minute, or quantities of even greater magnitude, would have been altogether insufficient to have saved this pit or, *ceteris paribus*, any other colliery from explosion, under the fearful conditions that a defective lamp and a sudden emission of inflammable gas were simultaneously found in juxtaposition. The preceding evidence delivered before the coroner and jury made allusion to an entire new shaft to the deep. Had this opening been timely and duly effected, in all probability the explosion would never have been heard of; because, in such case, a different arrangement of levels and cross-headings would naturally have resulted; that is to say, the whole of the works would have undergone a distinct and different distribution. But, even by this superior mode of winning, all skill and ability would have been defenceless against open or injured lamps, or those which had been in any possible manner tampered with." There was a straggling length of travel of the air to the extreme east, and the management is blameable for not having previously laid in those useless and profitless workings. Such a course would have avoided a very considerable amount of drag. Such shortening of the district had been advised, and the viewer well knew how much it would have eased all his returns on that side of the slope. It would even have superseded the necessity of another eastern split; indeed it was so self-evident, that it is surprising it was never carried into effect.

Over the laying out of the workings of the pit Mr. Brough could, of course, exercise no control, as they had assumed their existing shape long before he went into the district. The total absence of a new shaft to the deep, no doubt, induced the present wide-spread distribution of slope and levels—of cross-headings and stalls. The greatest error committed at the Black Vein Pit was the postponement to an indefinite period of a new shaft to the deep, and the endeavour to obtain a certain maximum quantity of coal without the aid of such essential grand new winning. The attempt to perform too much with restricted means is almost invariably attended with unsuccessful results. All experience tends to prove the truth of this assertion. It is indeed a serious complaint, and one of long standing in the coal mining world, that an insufficiency of shafts is too often put down. In the present instance he considers a new opening most essential, and that if it had been timely performed they would never have heard of the terrible loss of life that ensued. It is well known that some mines are far more liable to sudden outbursts of gas than others; it is a condition or event that occurs much more frequently than may be supposed, and no superintroduction of atmospheric air can prevent it. If the lamps hold good but little is said upon the subject, and for the most part the public know nothing at all about it. Mr. Brough then mentions Mr. Higson's statement before the Manchester Geological Society of the explosion prevented at the Arley Mine in 1859, and to the more recent record of a similar instance by Mr. John Brown, of Lund Hill; continuing that whether or not the Risca Colliery possessed the advantage of that chance of escape is a question for the gravest consideration. "Some of the evidence given at the inquest," he tells us "tended to the effect that the discipline was not such as should prevail in a fiery mine, and it further showed that the lamp department was not managed in the scrupulous manner demanded in a pit known to be liable to sudden outbursts of inflammable air. The viewer certainly had exerted himself to put an end to the dangerous habit of smoking underground. But we find, notwithstanding, that tobacco pipes were taken below, and that false keys were known to be in possession of the men; indeed, one was actually found in the pocket of a sufferer on that melancholy occasion. Lamps were also brought up *not* locked, though with their gauze cylinders attached and uninjured. The locking was performed both at the top and the bottom of the pit, even when the same shift of men proceeded to their daily labour. One witness (William Thomas) deposed that his lamp was locked at the top of the pit, whilst another of the same name swore that his was locked at the bottom; both cases on the same morning. I may further state that during the time I was occupied underground (nearly five weeks) it could not escape my observation that the lamps were not always well supplied with oil and wicks, and on different occasions I remarked on the quality of both to those who were then employed with me. Men who had never worked in fiery mines, and who were ignorant of the mode of handling lamps, had been known to be put on to work, and not many years since this very circumstance had given rise to something like a strike or stand out amongst the more experienced colliers."

With regard to the general state of discipline at the colliery, he can only make the remark, that though divided authority is not conducive to order and regularity of action, the absorption in too great a degree of all power and direction is equally dangerous. Where there is no amount of practical knowledge to guide and control the operations of a fiery coal mine, any undue interference in the actual working details is replete with perplexity and danger. His own opinion is that the viewer was entirely equal to the development of the mine; but, he would judge by the evidence at the inquest, that he was not vested with sufficient power to carry out his own views. There were several distinct departments to the conducting of which each individual chief, and he only, was especially confined, whereas the viewer of a colliery should invariably have every branch completely under his own direction and command, and should never be unnecessarily interfered with by the head manager, or any other person in authority.

The head overman could neither read nor write, but as he lost his life in the discharge of his duty, it would now be want of proper feeling to call in question his merits or abilities. Of the deputies (firemen) he can speak in a more decided manner:—One of them lost his life in the explosion; another proved by his own evidence that he was altogether an incapable person; a third (called an assistant firemen) was too young and inexperienced ever to have been placed in the responsible position of watcher over the lives and safety of his fellow-workmen; of the fourth he does not find it needful to make any special comment. Officers of this class are, he thinks, but little likely to exercise salutary control over the workpeople of the mine. He is induced to make the statement, that from all that passed under his observation at the inquest, the discipline of the pit was unquestionably defective.

INSTITUTION OF CIVIL ENGINEERS.

The Council of the Institution of Civil Engineers have awarded the following Premiums:—

A TELFORD Medal, and a COUNCIL Premium of Books, to WILLIAM HENRY PREECE, Assoc. Inst. C.E., for his paper "On the Maintenance and Durability of Submarine Cables in Shallow Waters."

A TELFORD Medal, and the MANBY Premium, in Books, to GEORGE PARKER BIDDER, jun., for his paper "On the National Defences."

A TELFORD Medal, to FRANCIS FOX, M. Inst. C.E., for his paper "On the Results of Trials of Varieties of Iron Permanent Way."

A COUNCIL Premium of Books, to FREDERICK BRAITHWAITE, M. Inst. C.E., for his paper "On the Rise and Fall of the River Wandle; its Springs, Tributaries, and Pollution."

A COUNCIL Premium of Books, to GEORGE HURWOOD, M. Inst., C.E., for his paper "On the River Orwell and the port of Ipswich."

A COUNCIL Premium of Books, to WILLIAM HALL, Assoc. Inst. C.E., for his paper "On the Floating Railway at the Forth and Tay Ferries."

The Council invite communications on the following as well as other subjects for premiums. For a limited number of papers of distinguished merit, pecuniary awards will be made, not exceeding in each case twenty-five guinea, in addition to the honorary premiums:—

On Reclaiming Land from Seas and Estuaries.

Description of Cast, or Wrought, Iron Cranes, Scaffolding and Machinery, employed in large works, in Stone Quarries, as Hoists, or Lifts on Quays, in Warehouses, &c., especially where either Steam or Water is used as a motive-power.

On the Mechanical Methods of Boring and of Sinking large Shafts, of introducing the Tubbing and the impervious lining, and of traversing running sand and other difficult strata.

Accounts of existing Water-works; showing the methods of supply, the distribution throughout the streets of towns, and the general practical results.

The Comparative Duty performed by, and improvements in the construction of, modern Pumping-Engines for raising Water for the supply of Towns, or for drainage of Mines; noticing in the latter case, the depth and length of the underground workings, the height of the surface above the sea, the geological formation, the contiguity of streams, &c.

On Boiler Inspection as practised in this country and on the Continent, with remarks as to the comparative merits of the two systems.

On Substitutes for Steam, and the causes of their Failure.

On the results of the use of Tubular Boilers, and of Steam at an increased pressure, for Marine Engines, noticing particularly the difference in weight and in speed, in proportion to the Horse-power and the Tonnage.

On the Form and Materials for Floating Batteries and Iron-plated Ships, and the points requiring attention in their construction.

Descriptions of the various kinds of Machinery in use in the principal Shipping Ports, for the Shipment of Coal; noticing particularly those in which the greatest expedition is combined with the least amount of breakage of the Coal; and also accounts of the means of unshipping and measuring, or weighing the Coal, on its arrival in port.

On the means of Utilising the products of the Distillation of Coal, so as to make Coke commercially as cheap as Coal; with descriptions of the Ovens, and of the best processes used in Great Britain and on the Continent, in the manufacture of Coke.

The Precautions to be adopted for guarding against Accidents by Fire-damp and After-damp in Mines.

The Chemical Analysis, and the application to economic purposes, of the Gases generated in Iron Blast Furnaces.

Description of Modifications of the present systems of Smelting Iron Ores, of improvements in the conversion of cast-iron into the malleable state, and of the manufacture of iron generally, comprising the distribution and management of Iron-works.

Improvements in the Manufacture of Iron for Rails and Wheel Tyres, having special reference to the increased capability of resisting lamination and abrasion; and accounts of the Machinery required for rolling heavy Rails, Shafts, and bars of Iron of large sectional area.

The Process of Manufacture, and mode of treatment, of Aluminium.

On Machinery adapted for the Better Separation of the various Substances found in Combination with Metallic Productions.

On the Substitution of Machinery for Manual Labour in Mining Operations; and on Hydraulic Machinery in Mines.

Railway Accidents—their causes and means of prevention; showing the bearing which existing legislation has upon them.

Memoirs and accounts of the Works and Inventions of any of the following engineers: Sir Hugh Middleton, Arthur Woolf, Jonathan Hornblower, Richard Trevithick, William Murdoch, of Soho, Alexander Nimmo, and John Rennie.

The competition for Premiums is not confined to Members or Associates of the Institution, but is equally open to all persons, whether natives or foreigners.

VENTILATION OF COLLIERIES.—In last week's Journal we referred to an improved system of ventilating collieries, proposed by Mr. J. G. Miller, of Cambuslang, a letter from whom we publish this day in another column. With reference to his proposition, we are informed that at the trial on Tuesday, before Mr. Sheriff Morrison, at the County-buildings, Glasgow, against the proprietor of the Garden Pit, Possil-road, for damages for injuries sustained by a miner from fire-damp, reference was made to the "double-door system," as advocated by Mr. Graham Miller (who was called to give his experience on the subject), and his plan being presented and explained by the Inspector of Mines (who was present), the poor miner gained his verdict,—97*l*., and cost: showing, that if Mr. J. G. Miller's plan had been adopted the accident could not have occurred in the Possil-road Pit.

THE COAL MINE INSPECTION ACT—THE WEIGHING CLAUSE.—An action of great importance, both to colliers and coalowners, has recently been heard at the Small Debt Sheriff Court, Glasgow, raised by one of the miners in the employ of Mr. J. Ferrie, of Old Farm Pit, Rutherglen, for payment of coals put up and delivered by the workman, but not truly weighed nor paid for according to the 29th section of the Mine Inspection Act. The master's agent stated that the case was of great importance, and, being the first of the kind in this district, he wished his lordship would allow it to be put on the ordinary roll, or continue it till after the decision of a similar case which had been raised at Hamilton, in the Small Debt Court there, and, by consent of parties, had been placed on the ordinary roll of Court. The sheriff said that although this might be the first case in respect to the true weighing of coal, so far as he understood, it was not likely to be the last, and that was no reason for delaying the case, or involving further expenses to the workman who had brought his case into the Small Debt Court, where he was justly entitled to be heard, and where cases of great importance were decided. He (the sheriff) would not, therefore, allow it to be put on the ordinary roll, and it must now be decided, unless both agents asked for a continuation. The workman's agent objected, and the master's agent admitted he was not prepared at present to defend the case, but would cist it. The master's agent and his manager then withdrew, in order that the sheriff might give decree in absence in favour of the workman for all his confiscated coals and expenses. This will be cisted, and an other hearing will thus be obtained. The working miners present immediately after held a meeting to deliberate on what further steps to take in the matter, when, after considering that the policy of the coalmasters appears to be to evade the weighing clause of the Act of Parliament by delay and heavy expenses, it was unanimously resolved that a general meeting of the miners should be held to consider the best means of compelling the coalmasters to pay for all coal put up without any confiscation.

MINERS' SAFETY-LAMPS.—Although much has been said about the futility of attempting to prevent explosions in collieries by the use of any lamp which it is in the power of the collier to open, whether by the extinguishing of the light, or otherwise, there are still very many who maintain that a reliable self-extinguishing lamp is much to be desired. Acting upon this view, Mr. Harby Barber, of Belgrave, Leicester, has patented an invention, the object of which is to prevent the flame being under any circumstance exposed, for which purpose, over and round the wick-holder, he places a tube or extinguisher, on which are two projecting arms; under the said arms, and round the nozzle of the lamp, he places a ring, having a counter-sunk catch on each side. Inside the ordinary cylindrical gauze cover he places another ring. On screwing the lamp into the gauze cover, after lighting the wick, the said ring, with catches, passes through the said ring inside the gauze cover; but on an attempt being made to unscrew and remove the lamp from the cover, the said tube or extinguisher round the wick-holder is drawn up over the wick by means of its arms, and the flame is extinguished. These arrangements admit of modification, but in all cases the top of the extinguisher is placed on a level with, or below, the flame, so as not to obstruct the light. That a lamp that can be opened, even by extinguishing the light, affords an opportunity to the collier to procure a naked light by removing the lamp top, and relighting the lamp, cannot be denied; but it is also urged that lamps are seldom opened, except through thoughtlessness; and that by placing in the hands of the collier an effective self-extinguishing lamp, little fear need be entertained of naked lights being exposed. It is thought that the extinguishing of the light would so effectually remind the collier of the orders he had received concerning the use of the lamp, and the penalty for disobeying them, that he would give up the idea of relighting. Whether Mr. Barber's lamp affords the desideratum which has long been sought of course remains to be proved; in the meantime, it may be stated that whilst reserving the right to introduce modifications in details, his claim is for the use of a screw, worm, or inclined plane, as a means for raising or placing an extinguisher upon the flame of a safety-lamp, to extinguish the light before the lamp can be opened; and, secondly, the use of a screw, worm, or inclined plane in combination with a spring so placed that the arms on the tube or extinguisher can pass it while the lamp is being screwed up, but acts as a means for extinguishing the light on any attempt being made to open the lamp.

NEW SAFETY-FUSE—*(From a Correspondent)*.—Among the many ingenious contrivances to lessen the danger attending the use of gunpowder, more especially among miners, the safety-fuse has hitherto enjoyed deserved reputation. It is interesting to trace the gradual improvement in that article from the primitive train, reed, rush, touch paper, &c., to the ordinary fuse now so generally used in blasting; but even this in its improved form, and with the exercise of every possible caution in its use, is liable to cause accident, and over which the miner has no power or control. The fuse may burn irregularly, hang fire from excessive moisture, or may be imperfectly constructed; all or either cannot be foreseen by the miner,—hence the terrible destruction of life and limb. Much of this kind of accident may now be considered at an end by the introduction of a simple but valuable improvement in the manufacture of safety-fuse, made by Mr. Joseph Victor, of Wadebridge. The power of mischief would appear to be reduced to its minimum by this man's ingenuity. (A description of the fuse appeared in last week's Journal.) Mr. Joseph Victor has very wisely patented his invention, and has already been offered 4000*l*. for the patent by a safety-fuse company.

PREVENTING EXPLOSIONS IN COLLIERIES.—Mr. Chas. Colwell applied for provisional protection for an invention "to neutralise the carburetted hydrogen and other gases tending to create such explosions, by a certain and liberal supply of atmospheric air to be continuously applied to all parts of the mines and other places affected, which has never yet been done;" but as he did not describe the invention, protection was very properly refused, there being nothing to show that he had invented anything, except that he promised to describe the means employed and "other improvements" in his final specification.

COMMERN LEAD MINES, RHENISH PROVINCE, PRUSSIA.

BY W. P. JERVIS, F.G.S., MINING ENGINEER.

Having treated of the stratified mineral deposits of Mansfeld, containing copper, silver, and nickel, I will ask your permission to say a word or two with reference to another in a younger rock, and of a most remarkable nature, in a very different part of Germany.—I allude to the lead mines of Commern, on the north flank of the Eifel mountains, about midway between Aix-la-Chapelle and Treves, and not far from the Belgian frontier.

The broad and long valley in which is situated the village of Mechernich, two miles beyond Commern, separates two gently undulating parallel ranges of hills, and is itself formed of pure white Triassic sandstone, upwards of 120 feet thick, belonging to the "Buntersandstein," the lowest member of the triad, and equivalent to the new red sandstone of Cheshire and Lancashire. The strike of the strata, identical with the axis of the valley, is from west-north-west to east-south-east. It is stated that this deposit was known and worked by the astute Romans, who had several important towns in this part of Germania,—among others Maestricht, Aix-la-Chapelle, Treves, and Cologne; but I must at once pass to the present condition of the mines. Three several lead mines have been established in this valley of late years, and are in great activity. One of them belongs to a French company, the others are worked by private gentlemen living in the neighbourhood. It is to one of these, that of Meinerzhagen, the property of the brothers Kreuser, that I wish to draw attention for a moment.

The observer approaching Mechernich by the road from Commern suddenly perceives a change in the face of the country; the luxuriant green of the fine forest trees gives place, throughout the entire extent of the valley, to a barren surface devoid of vegetation; and as he walks along the valley, if it be a windy day, he might fancy himself to be on the beach by the sea-shore, for the white sand blows about in a similar manner, intercepted here and there in its course by a tuft of sea grass, or by the few shrubs lately planted with success for that purpose. Less than half a mile and we arrive at two large open pits close together, respectively belonging to each of the two proprietors. Meinerzhagen Lead Mine is worked by "open-cast," like a sand-pit, and by levels and galleries approached by shafts. The reason for combining these two systems is too abstruse for me to explain; it would appear a plausible argument to recommend the exclusive adoption of the method found to be most economical.

In looking down into these pits, which are 130 to 150 ft. deep, and twice as long, the miners appear like bees in a hive—diminutive, but busily engaged in boring holes or filling their wagons with sand. At the first pit no machinery is employed, although tramways are placed for the conveyance of the oriferous rock; so we will at once enter the Meinerzhagen pit, clambering down the somewhat steep sides. The metalliferous deposit extends with considerable uniformity for the length of three miles; the section of the strata at this spot, beginning from above, is—Red sandstone, 10 fms.; conglomerate, ½, 1 to 2 fms.; galeniferous white disintegrated sandstone, 20 fms.; grauwacke —. The sandstone is so loosely coherent that a lump crumbles to pieces by the slightest stroke, or even by friction against a hard object. The use of gunpowder is simply to expedite the work by throwing down masses of many tons at a time, for it is by no means essential. The white sandstone contains somewhat rounded crystalline grains of galena, termed "Bleiknotten," about the size of a pea, pretty uniformly distributed through it; from their contrast in colour these are plainly visible to the naked eye, and may be detached by rubbing a piece of the rock between the fingers. Ledges are made on the sides of the pit where the miners stand, successively advancing to the north-west, part of the rubbish being thrown to the opposite worked side, so that the pit yearly moves onward. A tramroad at the bottom of the excavation leads by a short gallery to the foot of the engine-shaft, placed about 100 ft. from the edge of the pit. About once an hour a signal is given for the men to move off to a distance, or under shelter of the gallery. A dozen mines now go off one after the other, the rock being so loose (as before noticed) that no noise is produced by the explosion; a shower of disintegrated rock slowly reaches the bottom, which a fresh set of men immediately load as it falls into large wagons, which roll ceaselessly along to the shaft, and the boring is recommenced. Twelve men use in a fortnight 2100 Prussian pounds of powder and 110 slow matches to extract 1200 wagon-loads of sand, each of 40 cubic feet,—that is, 48,000 cubic feet, or about 3000 tons, of matter,—and are provided with 24 wagoners (Schlepper) to convey it to the foot of the engine-shaft. Part of the ore is worked by galleries; there is also a long adit, protected for its whole length by masonry. The pumping-engine is 150-horse power, and has an 18-inch pipe; it works with four strokes every minute, raising 10 cubic feet of water per stroke. This necessarily drains the neighbouring mine, the proprietors of which are obliged to pay a handsome yearly compensation. The levels are made so as to leave abundance of pillars; but this method of working seems less applicable for such ore than the open-cast. Here and there in the galleries may be noticed streaks of copper vitriol, coming from a trace of copper pyrites, not visible to the naked eye, by its oxidation and subsequent solution of the sulphate. The only other ores I noticed—and those only as mineralogical rarities—were bacillary crystals of cerusite (carbonate of lead), yellow pyromorphite (phosphate of lead), and another which I believe to be condurrite (phosphate of copper). A small quantity of brown iron ore is found with these in the conglomerate, where the galena itself sometimes forms little veins, 1-10 in. to ¼ in. in thickness, running for several inches in length.

By now entering the engine-house we will be able to follow the process of raising the oriferous sand by two horizontal 50-horse power steam-engines. The shaft is double, and 30 Lachters (34 fms.) deep, one engine belonging to each half. The construction of the shaft is peculiar; the platforms entirely occupying the half in which they are placed, so that the full wagon has to remain at the bottom until the arrival of the empty one descending on the same side. A cubic Prussian foot of oriferous sand weighs about 140 lbs.; as each wagon contains 40 cubic feet, they raise 50 cwts. at a time. The rapidity of the extraction so interested me that I determined to verify the statement I had from the engineman,—that in 24 hours each engine raised 1000 wagons from the depth of 34 fms., or both together 2000 wagons, containing a total of 96,000 to 100,000 Centner (4800 to 5000 tons) of matter. No wonder, indeed, that the flat hemp-ropes employed only last three months, or at the utmost four. The actual interval employed in placing the wagon on the platform, raising it to the surface, rolling it away, upsetting the sand into a hopper at the side, and replacing the wagon on the platform, is sixty seconds. Meanwhile, the hoppers being somewhat above the level of the ground, two men outside the building raise the trap by which the sand falls of itself into a long wagon, capable of containing the same quantity as the former, though differing in point of form, and placed crosswise on the wheels, so as to facilitate their being tilted over into bins placed at the head of the percussion tables. As there are two lines of rails, the wagons are tilted outwards; they are likewise filled, perform the journey of 15 to 40 yards, and return for a fresh load within a minute. Several men are allotted to each table, to shovel the sand on a well-watered iron grating, through which the finer parts and ore can easily pass, but which retains all the conglomerate pebbles accidentally mixed with the rest. These percussion tables deserve inspection, from their dimensions and the prodigious quantity of matter they treat, while the violence of the shocks rapidly given to the frame makes the whole place to vibrate and rock as though it were being intentionally battered to pieces. From the great difference in specific gravity of the sand and galena, and the perfect looseness of the concentrated metalliferous particles, they are separated with tolerable ease by a simple passage over the table. A few grains of sand, however, still adhere to each little rolled shot-like globule of galena, which is treated a second time with greater care at the end table to purify it.

The double series of percussion tables are deluged with water to carry off the large quantity of sand by main force into a wooden canal. The problem to solve was, how to get rid of all this sand in the most economical manner; and its solution within the past year reflects great credit on the inventor. The canal is led over eight parallel lines of rails, forming the commencement of a railway of the same gauge as ordinary passenger lines, and in such a manner that a large bolier-plate wagon may just pass under each division. The water holding sand in suspension flows for eight or ten minutes into the wagon, but only the solid matter is retained, for the purified water flows out as fast as it goes in, by a lip on the side, capable of containing 250 cubic feet, directed towards a second parallel, but lower, canal. Four sets of rails respectively converge towards the main line, descending with sufficient gradient to enable one man to propel the loaded wagon to that point. From thence two old locomotives, of 30-horse power, purchased within the past year from the Rhenish Railway Company, perform the journey to the end of the burrow, now at least 250 yards long. The wagon is propelled from behind to its destination; the end is then raised to let fall the sand, and the engine meanwhile placed behind an empty wagon propels it in its turn to the station under the canal. Each locomotive serves for four wagons, of which there is always one full in readiness: 120 wagon loads are removed daily, making a total of 75,000 cubic feet of sand. The two locomotives require four men to manage them, and consume a ton of coke. They cost together 3*l*. 8s. 1d. per diem, and perform the same work as the 72 horses previously kept for the purpose at a daily expense of 15*l*.

To return to the water which has parted with its mineral matter to the wagons. It is raised by machinery to its former level, to serve over and over again for the percussion tables. This is effected by steam-power, setting in motion a pair of gigantic and peculiarly constructed water-wheels. The circumference and one side of these wheels is completely closed, and formed of boiler-plate, supported by a strong set of radiating iron spokes. The buckets are placed inside the wheel, and plunge into the water-basin, which they raise, and let fall inwards from the summit of the wheel into the upper canal, which by the ingenious radiation of the iron rods spoken of actually comes within the wheels.

The washed ore is conveyed to a long building containing 150 stamps moved by steam-power. The finely-stamped galena is then removed to circular buddles, where it is easily brought up to 80 per cent. of lead, and accumulates to the depth of a foot. A contract for so many years has been made by the Messrs. Kreuser with the lead-works of Stollberg, stipulating that the latter should purchase all the ore raised, which must contain a minimum of 58 per cent. of lead. This has originated a process as novel as may anywhere be seen, certainly unsurpassed in point of ingenuity. The notion of modifying the agreement as to the percentage of metal in the ore, after finding that it contained double the anticipated quantity, seems never to have entered into the minds of the worthy proprietors. The galena is indeed carefully brought up to 80 per cent. on the buddles; but, in order not to lose, the poor metalliferous slime is treated in large reservoirs, from which it is occasionally dug out and thrown on lines of iron-plates covering the long flues from the boilers, and running the whole length on either side of the slime-pits. After being dried, this highly siliciferous slime, containing only 35 to 40 per cent. of lead, is added to the rich galena, to bring it down to 58 or 60 per cent. I really trust that the next visitor to the Meinerzhagen Mine may be shaken in regard to his belief of my strict veracity in detailing such an unscientific process, which, I think, is capable of considerable modification.

All eulogy, however, to the noble efforts of the Messrs. Kreuser, who, rising from a mere nothing, purchased the right of the mine from a nobleman for a nominal price, and have by their untiring industry and praiseworthy efforts brought about a change of no ordinary kind in their neighbourhood. The marvel rather is how they should have had such large views as to have speculated on so enormous a scale. The employment of locomotives in a metalliferous mine is new to me. The railway velocity with which every operation is carried on could not fail to strike every one. Though the quantity of ore annually treated and sold reaches 300,000 Centner (15,000 tons) of galena, with 58 per cent. of lead, double that quantity will ere long be treated, the new stamps-house

being constructed to contain 300 stamps, instead of the 150 now employed. Smelting-works are also contemplated in the course of a short time. The Messrs. Kreuser would, perhaps, do well to allow others to share the colossal profits of their mines, but doubtless they have their reasons for keeping the whole affair in their family.

NEW SOURCE OF COAL FOR STEAM NAVIGATION.

By the intervention of recent events a permanent local supply of coal to the East has become of the utmost national and commercial importance. At Singapore coal realises between 60s. and 70s. per ton, and, therefore, it would be a great boon, both to producer and purchaser, if that important place, which is daily becoming of increasing commercial repute, could be supplied at an ordinary cost with a good description of coal, as countless steamers of war and mercantile vessels—English, French, Dutch, and Spanish—are constantly navigating these eastern seas, to which a ready local supply of coal is of primary importance. Impressed with the increasing necessity of meeting this requirement, Her Majesty's Government have granted the greatest facilities for the development of the mineral resources of the Island of Labuan, which is described by Mr. Smith, of Ettingshall Colliery, near Bilston, "as one continuous coal field." Referring to this island, Mr. M'Culloch observes "that it lies near the best route for shipping from the Straits of Singapore to China," and refers to its advantages as a harbour of refuge, and a convenient station for steamers and other ships of war, stating that its possession would give us a command of the China Sea. Mr. D. Smith, who has been practically acquainted with coal mining in Great Britain for more than 20 years, and has also had considerable experience in the East, states that the demand for steam coals in the East exceeds 200,000 tons, which can be permanently met by the produce of the practicably inexhaustible coal fields of Labuan and Borneo. Irrespective of the unanimous testimony of several of the Peninsular and Oriental Company's engineers, and other authorities of practical eminence, as to the excellent quality of the coal for steam purposes, Her Majesty's Government, after having used no mean quantity, are so satisfied with the results that they have expressed themselves prepared to take regular supplies for the use of the navy. By the employment of Chinese labour (which, it appears, can be obtained to any extent), Labuan coal, equal for all practical purposes to the best English coal, can be put on board at Labuan at 10s. per ton, and deliverable at Singapore, a distance of 700 miles, at 24s. per ton, the present price of coal at that place being, as stated above, from 60s. to 70s. per ton. Upon the main land of Borneo, from which Labuan is separated by a narrow neck of sea, the same description of coal has been traced for many miles into the interior. In addition to the known resources of the Island of Borneo, it is believed that further research will prove it to be rich in the production of iron ore. This assumption is materially strengthened by the fact that the natives use implements manufactured with steel of the best description; indeed, their swords are of such a quality that they are able to sever the barrel of any ordinary musket, but whether that arises from the manner in which the metal is tempered or the quality of the ore is at present undetermined. There can be but little doubt that the development of the resources of Labuan and Borneo, more particularly their coal, by reason of the opening of the river navigation of China will receive a most important impetus, affording an extensive field for the employment of English capital.

NOTES ON MODERN GEOLOGY—No. I.

SIR,—It would appear advisable to consider, with regard to the changes which auriferous deposits may undergo in depth, whether it is, as yet, at all possible to give *general* rules of such a nature as to be universally reliable,—simply because we possess as yet (thanks to the despotism of practically weak-footed theorists, &c., having paralysed, and to some extent still paralysing, the efforts of many good and zealous observers) a too scanty and too arbitrarily arranged store of detail-knowledge, as to be able to furnish such rules.

The rule that auriferous quartz veins generally decrease in richness in proportion as the respective works of exploration progress in depth, is founded chiefly on experience, as far as that has gone, but possesses the merit of tending to prevent great, often possibly useless, expenditure of money. But if now in other, may be equally extensive, localities it should be discovered that many auriferous quartzose deposits were proportionally richer at a certain depth than at surface, then, no doubt, other rules would be sought for and found, equally useful in *their* time.

It has been noticed that a remunerative percentage in gold continues to a considerable depth in the case of auriferous deposits which consist chiefly of mineral combinations of principally a pyritous nature. But, on careful consideration, it would almost appear that both kinds of auriferous deposits, those of a pre-eminently quartzose and those of a pre-eminently pyritous nature, may justly be classified under one and the same head, inasmuch as quartz veins, carrying native gold more or less associated with irony incrustations and nests of gossan, originally have been—as at certain depths they will be found still to be—combinations of quartz with auriferous pyrites, their locally oxydised ferruginous nature being the result of a decomposition or oxydation of such pyrites, owing to, and during, and subsequent to, which decomposition the particles of gold were liberated, deposited, more or less transported, and more or less concentrated at certain points. The nature of the combinations which surround portions of quartz veins in which only remnants of gold, and almost *no ferruginous* incrustations are met with, is generally such as strongly to indicate a more advanced degree of the metamorphosis, oxydation, and silicification of such portions.

Anyone who is practically acquainted with the subject, and who does not voluntarily deprive himself of a sure footing for his observations by preferring apparently comprehensive, but in reality philosophically very shallow, hypothetical notions to a calm, or as much as possible unbiassed, observation of facts, will perceive that truly reliable rules as to the continuation in depth of the remunerative portions of auriferous deposits can only be arrived at by a careful actual investigation of all, even the most insignificant, detail-features of each respective depcsit and its enclosing rock, such observations, &c., comprising in their scope, amongst others, all the mineral combinations, their relative position and distribution, chemical relationship, and, possibly, the vestiges of such chemical changes that may have taken, and may still take, place, and the *general structural* as well as *minute structural* character of the whole, together with the traces and indications of such mechanical influences which, generally or locally, may have furnished germs for important chemical changes.

It has been abundantly proved that quartz veins and joints are principally the results of chemical action, caused, in many cases, by previous mechanical influences, and resulting in the secretion of silicious substances in certain shapes and positions within, or in the *silicification* of certain channels or joints, or cleavages of a rock. It has lately (and many times formerly too) been so frequently observed as almost hardly to necessitate mentioning, that not only in certain mineral deposits, but also in whole extensive masses of rocks, a greater amount of quartzose components, and a higher degree of silicification of some components, is almost always accompanied by a proportionally higher degree of oxydation or decomposition of *other* components. Amongst the latest of the very numerous facts which prove the formation of quartz secretions, &c., to be owing to certain more or less slowly-acting, and in most instances *now still active*, chemical agents of nature, I may allude to the formation of *felspar and quartz* in nests in the (secondary) conglomerate, which have been mentioned, and proved to be of recent and *aqueous* origin, by Dr. Volger, whose opinions were, on subsequent observation, fully corroborated by Professor Breithaupt, of Freiberg. One of the localities where proof positive of the comparatively recent and aqueous formation of such traditionally "ancient and plutonic" mineral has been, and still may be, obtained is in a wand of conglomerate near Flöha, on the road which leads from Chemnitz to Oederan and Freiberg, in Saxony: those aggregations of minerals exhibited on their lower surface concavities which correspond in their shape to the convexities of the portions of the conglomeration on which they had been formed.

Many of your practical readers have, no doubt, often met in mineral deposits with nests that were thickly lined with beautiful quartz crystals, several of which appeared to have been broken off, but were, nevertheless, firmly attached to the others,—the fracture being distinctly visible, but filled and *cemented* together with a glassy quartz, which was not different in appearance from that of the quartz crystals themselves: such cavities, on being broken into, are mostly found to be filled with *water*.

Many granites contain quartz combined with easily-fusible mica; a combination which is incompatible with the hypothesis of an igneous origin of such granite.

Oligoklas (felspar), which forms an essential component of many granitic, porphyritic, and basaltic rocks, has been proved to be a mineral but comparatively *recently* produced through aqueous mediation, &c.

It is more than probable that careful investigations into the chemical changes and transmutations of minerals that have been, and are still, continually going on, not only at the surface but also within the very mass of rocks, will, nay *must*, be as productive of reliable and highly useful results to all, and to miners especially, as the field which such investigations open is truly immense; and it must be pleasing to every conscientious observer, who modestly believes that we have still to learn a VERY GREAT DEAL by direct, and humble, and patient observation of Nature, to notice that of late the influence of the assistance of physical, chemical, and mathematical principles and laws in geological investigations has already done much towards liberating that science from the mystifying incubus of both the ultra-neptunic and the (recently almost *more* injurious) ultra-plutonic hypotheses,—and that most of such hypotheses, however great at times may have been their influence (owing, probably, to early educational impressions) even with otherwise high scientific authorities, will before long be consigned to what may be called the nursery tales of science.

Erzegebirge, Saxony. G. J. GUNTHER.

IMPROVED TRANSIT—PNEUMATIC DESPATCH.

Some very interesting experiments have been conducted during the week, under the auspices of the Marquis of Chandos and the directors of the Pneumatic Despatch Company, in order to demonstrate the utility and practicability of the invention which the company proposes to develope. As most of our readers are aware, the chief feature of the invention consists in propelling, or rather attracting (for such it really is), a train of carriages through a tube by the creation of a vacuum before them, the tube being, in fact, the cylinder, and the carriages the piston. The locality selected for testing the project was on the ground adjoining the Victoria Railway Bridge at Battersea, and belonging to the Southwark and Vauxhall Waterworks Company and London and Brighton Company, where upwards of a quarter of a mile of the tubing has been laid down, various irregular curves and gradients being introduced to show that hills and valleys would not prevent the effective working of the system. The arrangements have been entirely in the hands of Mr. Latimer Clarke and Mr. Rammell, and the apparatus certainly works as well as could be desired. On Tuesday the entire length of way (452 yards) was traversed some 20 times, and the space of time occupied in the transit of the two carriages used for each journey, and loaded with 1½ tons of sand-bags, varied from 50 to 58 seconds, and we understand that the passage has been made in 45 seconds.

Although the vacuum could, of course, be produced by any convenient means, we may, to render the whole system more intelligible to our readers, give the details of the apparatus used in the trial experiments. The exhausting fan consists of a sheet-iron disc some 20 ft. in diameter, the two sides being apparently about 2 ft. apart at the axle, and 2 or 3 in. at the periphery; and this is made to rotate rapidly by a 15-in. cylinder engine, working at about 30 lbs. pressure. The tubes are nearly circular, but the circle is broken, in order that the tube may form at once the cylinder and tramway. The carriages are of the same configuration as the tube, and around the principal carriages peculiarly formed India-rubber washers are placed, to form what may be termed the packing; this packing, however, is about ½ in. from the tube on every side, as it will be readily understood that were it tightly packed the perfect vacuum created in front would give the carriages almost the velocity of a cannon ball, and render the whole apparatus useless. The first cost would, no doubt, be less than that of a railway, and as the tubes could be as easily laid as, and when laid would give no more inconvenience than, ordinary gas or water mains, it is thought that there would be nothing to fear on this point. The diameter of the tube is 30 in., and of this the carriage would form a piston of some 500 square inches. At present it is said to be worked with a pressure on the square inch of a few ounces only, and by increasing this any amount of speed might be obtained. The apparatus has already been adopted by the Electric Telegraph Company for the conveyance of despatches between Mincing-lane and Lothbury, and as the system is equally applicable for long distances and extraordinary speeds, it is anticipated that it will receive extensive support for the establishment of a rapid means of intercommunication between the principal cities, not only in this country, but on the Continent also.

WRIGHT'S SAFETY RAILWAY.—We have already fully described the improved safety kerb invented by Mr. Wright, of George-yard, Lombard-street, and we understand that upon a recent occasion when the inventor exhibited the working model of the contrivance to Lord Palmerston and the President of the Board of Trade it met with their entire approval. Mr. Wright has also received the thanks of the King of the Belgians for the invention, and states that it may be applied alike to the ordinary wooden sleeper railways now in use, and to his own complete system, and that it is subject to various modifications both in its application and cost. Mr. Wright contends that the present permanent ways are too weak, and in too many small weak parts for the increased weight of engines, trains, and speeds, hence the cause of accidents, and the enormous expenditure for maintenance; and that had railway companies adopted this "prevention," many persons recently sacrificed would have been now living, and there is no excuse for railway directors killing people when it can be prevented.

AIR-ENGINES.—Mr. F. Howarth-Edwards, of Newcastle-on-Tyne, has patented some improvements in engines in which air is used instead of steam. The cylinder in which the air is heated is surrounded by the fire, and the lower portion kept at a low red heat; the plunger is encircled with wire-gauze to take up the surplus heat of the air forced through such gauze by each downstroke of the piston, which fits into the bolier, and to heat the fresh feed-air. The air in the reservoir is kept at a pressure of 100 lbs. on the square inch. The details of the invention are stated to be capable of great variation and modification. Mr. A. V. Newton, for a correspondent, has also patented an improved air-engine, which consists of three horizontal cylinders arranged end to end; the centre one, into which the others open, being the smallest. This central cylinder is surrounded by the furnace, and is fitted with a piston, on each side of which the air acts alternately; the cranks and connections are the same as with ordinary engines.

RAILWAY TYRES.—Mr. A. P. Stocker, of Wolverhampton, proposes to combine layers of steel, iron, or puddled steel with layers of ordinary wrought-iron, and rolling and welding them together, so as to combine increased durability and power to resist wear and tear with sufficient toughness to resist breakage.—Mr. J. Fenton, of Queen-street, Lincoln's Inn, has also proposed an improvement connected with railway tyres. It consists in hollowing out or cutting away a portion of the inner side of the inner tyre, sole, or felloe; and on the outer edge of the wheel the line left by the removal of a part of such portion, being parallel with the edge of the inner tyre or felloe, and the part inclined, or the whole may be inclined. He then forms the outer edge of the wearing tyre to overhang and fit under the outer edge of the inner tyre or felloe, and at intervals he indents and sets up into the part removed from the inner tyre or felloe the overlapping part of the outer tyre.

STILMANT AND ALLAIN'S BRAKE.—This railway and other carriage brake just specified by Mr. Henry, the patent agent, Fleet-street, consists of an arrangement in which the required retarding or stopping action is produced by introducing a wedge, block, or suitably shaped body, between the wheel and an inclined plane, on a firm or rigid rod, bar, or arm; the wheel in continuing to revolve dragging the block towards the rail, until the required rubbing or jamming action is obtained. The wedge or block may be conveniently operated by linking it to a lever suspended below the carriage. There may be two rigid brake bars, one on each side of the carriage, each having a common block at the other end, so that one lever may apply the brake to four wheels at the same time.

ANIMAL CHARCOAL.—An improved method of obtaining animal charcoal and a larger quantity of liquid products, whilst the quantity of gaseous products not condensable in the ordinary way is diminished. Bones or other animal matters are placed in retorts, such as are generally employed in the manufacture of animal charcoal, and are first submitted to a temperature of from 400° to 600° Fahr. When the condensable products are distilled over the heat is raised to 800° or more, and all volatile products driven off. The retorts are allowed to cool to 400° or less before the residue or charcoal is drawn out. The retorts are then filled with a fresh charge, and the process is repeated. By adopting this method he obtains a charcoal having superior decolourising properties, together with a larger quantity of liquid products, including paraffine, paraffine oil, benzole, naphtha, ammonia, nitrogen compounds, and other generally similar products, whilst there is less material lost in the form of incondensable gases.

DALVERNY'S CORK-CUTTING MACHINERY.—This invention, just specified as a communication to Mr. Henry, patent agent, Fleet-street, relates to three arrangements of machinery. The first is for cutting the cork into blanks, and consists of a machine in which are two sets of revolving cutters, fitted in different parts of the apparatus, in directions at right angles to each other, so that the cork, having passed through feeding rollers under the one set, is carried to a platform under the second set, and so cut into blocks or blanks of square or oblong form, the second set travelling to and fro on an endless screw, as well as revolving. The second machine is chiefly for cutting conical corks, bungs, &c., and consists of a set of cutters serrated at one edge and plain knife-edged at the other, fitted in a frame capable of adjustment at a required angle or slope, the cutters acting on blanks held between two sets of spindles caused to revolve by pinions in one set, in gear with a travelling rack. The third machine is furnished with 120 cutters carrying pinions, the 120 pinions being arranged in rows of six, and every four rows in a group driven by one pinion, the driving arrangements being such as to work the whole collection alternately up and down, shifting the cork four times, till the desired number of corks have been cut. The cutters are tubular.

BUOYANT FISHING NETS.—Messrs. Lepage, Pombla, and Segrimean have just specified (as a communication to Mr. Henry, the patent agent of Fleet-street) an ingenious arrangement of fishing net. Here the net is fitted with tubes, or chambers, of caoutchouc or other elastic material, which may be inflated at pleasure, and thereby rendered buoyant in order to bring up the net and its contents from the depth at which they may be submerged. These tubes can be readily emptied, so as not to interfere with the submersion of the net. In another arrangement the net is supplied with empty casks, and also fitted with a weight, which keeps the net down, but may be detached from the net, and pulled up by a cord in the fisherman's reach, and thereby releases the net to the action of the casks, which draw it up to the surface. In a third modification tubes are used, which may be filled with water to sink the net, and emptied of the water and charged with air to raise it.

STEAM-ENGINES AND PUMPS.—An invention has been provisionally specified by Mr. T. Moy, Clifford's Inn, for improvements in direct-action steam-engines and pumps, which consist in the construction and arrangements of the parts hereinafter stated, whereby four rectangular pistons, working in one steam-box, and fitting the interior thereof, are made to produce a continuous revolution of the crank and shaft. For this purpose two of the pistons are made to work horizontally and two vertically. The two pistons which work horizontally are connected together by long bolts or rods, so as to leave a space between them equal to the length of the pistons which work vertically, and these are also connected together (but at some distance apart) by suitable means. This frame or means of connection of these two vertically-acting pistons carries brasses, in which the crank-pin is inserted. By this means a connection is formed between the crank and the two pistons which work vertically, and these pistons are caused to act on the crank in the vertical directions of its revolutions, and they travel with it in the horizontal direction. The two pistons which work horizontally are also made to act against the ends of the other two pistons, and move them in a horizontal direction. Thus a connection is formed between the two pistons working horizontally and the two pistons working vertically and the crank, by means of which the crank is alternately acted upon in a vertical and horizontal direction, and its continuous revolution effected. The engine may also be used as a force-pump, by applying power to the shaft and adapting ordinary pump-valves to the engine.

MOTIVE POWER.—Some improvements in the production of motive power by the application of the dead weight of liquids, and in the apparatus connected therewith, have been provisionally specified by Sir J. T. Bethune, Bart., of Paris. To each extremity of a balance-beam, mounted on a strong pedestal, he suspends a metallic recipient, the capacity of which varies according to the force to be produced. In the bottom of each recipient is pierced a circular opening, and over this opening is adapted the upper end of a metallic cylinder, the lower extremity of which is fitted with a piston or plunger, provided each with an ordinary circular slide valve. These pistons work each in a pump body, in the bottom of which is fitted an escape pipe provided with eduction valves, and passing to a driving-wheel mounted apart on cast pillars. This wheel is surrounded by a metallic circle enclosing the pallets, and communicates with a return pipe, by which the liquid expended in the working of the machine is thrown back to a fixed reservoir, from which it is distributed to the suspended recipients. The apparatus thus arranged and charged with liquid (water, for instance, or even mercury), one piston being at the top of its pump body with its slide valve closed, whilst the second is at the bottom with its valve open. The inventor considers that the machine will continue to work as long as there is a communication between the reservoir and the recipients.

LUCK'S PATENT BAGATELLE AND OTHER TABLES.—The specification of this patent, just filed by Mr. Henry, the patent agent, Fleet-street, relates to a table which when closed presents the appearance of an occasional or other form of table, and when opened exhibits fittings for bagatelle or other purposes. The top, or "overlying part," is hinged to the contiguous portion called the "underlying part," which latter is supported on springs concealed in the legs, supports, or framework, so that when the weight of the overlying part is removed from off the underlying part, the latter slides, or moves, upward in the framework, and comes level with the inner surface of the overlying part, and the corresponding surfaces being fitted with bagatelle arrangements a complete bagatelle board is thus formed. When the overlying part is closed its weight overcomes the resistance of the springs, and the underlying part slides down again in the framework.

Spanish Consulate, Liverpool.

SALE OF QUICKSILVER.—By Royal Order received in this Consulate, the Spanish Government has resolved that the SALE OF QUICKSILVER, from the MINES OF ALMADEN, shall be made only in Seville and Madrid. All persons desirous of purchasing this article must address themselves in the first place to the Commissary of the State Mines, and in the second to the Superintendent of the Mint, who will receive tenders, and give every information as to the mode of payment. The quicksilver will be delivered in iron bottles of three Spanish arrowbas each. The prices, according to the aforesaid Royal Order, are as follows, viz.:—

634 reales per iron bottle, for any number from 1 to 999.
632 reales per iron bottle, for any number from 1000 and upwards.

The Sale of Quicksilver is still continued at the offices of the Spanish Financial Commission, 6A, Tokenhouse-yard, London, where it can be procured in iron bottles of 75 lbs. weight English, at the undermentioned prices:—

£7 per iron bottle for any number from 1 to 999, less 3 per cent. discount, and ⅛ for brokerage.
£7 per iron bottle for any number from 1000 and upwards, less 3⅛ per cent. discount, and ⅛ for brokerage.

The purchasers binding themselves to export the quicksilver from London.
July 23, 1861. H. L. DE VEDIA, Spanish Consul.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 29th July, 1861, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY— BRITISH IRON.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 29th of July, 1861, after which hour no tender will be received.
India Office, July 16, 1861. GERALD C. TALBOT, Director-General.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given, that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 29th July, 1861, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY— IRONMONGERY.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 29th of July, after which hour no tender will be received.
India Office, July 16, 1861. GERALD C. TALBOT, Director-General.

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of the proprietors of this association will be HELD at the offices of the company, in conformity with the Deed of Settlement, on TUESDAY, the 30th of July inst., at One o'clock precisely.

And notice is hereby also given, that at the said half-yearly general meeting the election of a director of the company will take place, to supply the vacancy in the direction occasioned by the death of the late Charles William Grenfell, Esq. The shareholders will also have to elect at the said meeting an auditor, in the place of Pascoe Charles Glyn, Esq., resigned.

It is necessary that persons intending to offer themselves as candidates for the direction or auditorship should leave notice of such their intention at the offices of the company, at least 14 days before the day of election, and exclusive thereof.

WALTER SHAIRP, } Directors of the
GEO. WHITMORE, } Company.
Gresham House, Old Broad-street, July 9, 1861.

CLARENDON CONSOLIDATED MINING COMPANY OF JAMAICA (LIMITED).—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the Clarendon Consolidated Mining Company of Jamaica (Limited) will be HELD at the offices of the company, as below, on WEDNESDAY, the 31st day of July inst., at Two o'clock precisely, in conformity with the terms of the company's Deed of Settlement.

And notice is hereby further given, that the transfer books of the company will be closed from the 22d July to the 1st day of August, both days inclusive.

By order of the Board, JOHN H. KOCH, Sec.
187, Gresham House, Old Broad-street, London, July 15, 1861.

COPIAPO MINING COMPANY (LIMITED).—Notice is hereby given, that a SPECIAL GENERAL MEETING of the Copiapo Mining Company (Limited) will be HELD at the office of the company, No. 2, New Broad-street, on FRIDAY, the 9th day of August next, at Two 'clock precisely, for the purpose of considering, and, if deemed advisable, of finally approving and adopting, by way of special resolution pursuant to the Joint-Stock Companies Act, 1856, sections 33 and 34, the Articles of Association for the government of the company, approved and adopted at the special general meeting of the company, held on the 5th day of July inst.

Dated July 23, 1861. By order of the Board, EDWARD J. COLE, Sec.

THE WORTHING MINING COMPANY (LIMITED).—Notice is hereby given, that the ORDINARY ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at 20, St. Helen's-place, Bishopsgate, E.C., on MONDAY, the 12th day of August next, at Two o'clock in the afternoon precisely, to receive the report of the directors and balance-sheet of the company for the past year; to elect two directors in the room of W. G. Jackson, Esq., and C. R. Essex, Esq., going out of office by rotation, but who are eligible for re-election, and offer themselves accordingly; and to transact the ordinary business of the company.

By order of the Board, GEORGE LAVINGTON, Sec.

PORT PHILLIP AND COLONIAL GOLD MINING COMPANY.
Incorporated by Royal Charter.

Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the above company will be HELD on WEDNESDAY, 31st. day of July inst., at Two o'clock in the afternoon, at the London Tavern, Bishopsgate-street, in the City of London, for the purpose of considering a statement of the proceedings of the company since the general annual meeting held in January last; also a statement of its present financial position; and for the purpose of passing a resolution enabling the directors (should the meeting so resolve) to divide and distribute on account, amongst the shareholders, a sum amounting to one shilling per share, appearing as profit of the current year's working, now in hand, more than is requisite for any probable contingencies of the year.

C. H. FIELDER, Secretary.

N.B.—The Transfer-books of the company will be closed on Saturday, the 20th inst., and reopen on Thursday, the 1st August.

*** The proprietors will please note change of address.
Offices, 35, Bucklersbury, Cheapside, London, E.C., July 18, 1861.

NOTICE IS HEREBY GIVEN, that, by Indenture, dated the 24th day of June, 1861, JOHN CAMERON MACDUFF, of No. 5, VICTORIA STREET, in the CITY of BRISTOL, DRAPER, ASSIGNED unto ROBERT WILSON, of the CITY of BRISTOL, HAT MANUFACTURER, and THOMAS HUNTER, of HIGH STREET, in the TOWN of MANCHESTER, in the COUNTY of LANCASHIRE, WAREHOUSEMAN, all and every the STOCK IN TRADE, WARES, MERCHANDISE, FIXTURES, HOUSEHOLD and OTHER GOODS, CHATTELS of EVERY DESCRIPTION, SUM and SUMS of MONEY, DEBTS DUE and OWING, READY MONEY and SECURITIES for MONEY, BOOKS, PAPERS, and WRITINGS, and ALL OTHER his PERSONAL ESTATE and EFFECTS, upon trust for the equal BENEFIT of the CREDITORS of the said JOHN CAMERON MACDUFF; and that the said Indenture was duly executed by the said John Cameron Macduff and Robert Wilson respectively, on the day of the date thereof, and the execution thereof by them attested by James George Hobbs, of the said City of Bristol, solicitor, and was duly executed by the said Thomas Hunter, on the 3d day of July now inst., and the execution thereof by the said Thomas Hunter was attested by James Sedden, of the said town of Manchester, solicitor, and that the said indenture now lies for inspection at the office of the undersigned.

JAMES GEO. HOBBS, Solicitor,
Bank of England Chambers, Broad-street, Bristol.

THE CENTRAL SNAILBEACH MINING COMPANY (LIMITED).

Capital £10,000, in 10,000 shares of £1 each.
Deposit, 2s. 6d. per share, payable at Messrs. Rocke and Co.'s, Bankers, Shrewsbury.
Proposals for incorporating this adventure as a joint-stock company, with limited liability, and for raising further capital.

The adventurers of this mining sett, situate two miles from the Minsterley Railway station, Salop, who are for the most part practical miners, experienced in the mining operations of the district, have occasion to raise about £4000, for the prosecution of the works already in progress, and otherwise developing it. Solely as a precautionary measure, they have decided upon making the capital £10,000.

The adventurers hold a tack-note of the minerals (of which a lease can be had for 21 years, at a royalty of 1-12th) under a surface of about 295 acres, actually adjoining and lying west of the far-famed Snailbeach Lead Mine, and also north of the New Venture Mine. Through this sett, which is highly mineralised, several known veins run, especially the celebrated Snailbeach vein, from which so much lead ore has been raised.

They have carried on operations at or near the surface, principally towards the south boundary, by shallow levels, trenches, &c., which present every encouragement and inducement to prosecute the workings in depth, and especially to develope the ground intervening between the northern and western boundaries.

The above-mentioned contiguity of this sett with the Snailbeach Mines (from which enormous profits have been made for many years), and the fact that the sett holds several of the lodes of the New Venture Mine, with others which intersect within its boundaries, render this adventure one of great value, and worthy of a proper and efficient working.

The adventurers have pleasure in referring to the report of Messrs. Phillips and Darlington, 26, Gresham-street, London; also to the lithographic plans of the sett, which can be had on application. The strictest investigation by personal inspection is desired, upon which every information will be afforded. The adventurers propose to constitute themselves a joint-stock company, with limited liability, with a nominal capital of £10,000, in £1 shares, upon the following terms:—

1.—That a lease be forthwith prepared, and, upon incorporation of the company, executed.

2.—That all outlay judiciously made by the present adventurers in opening the works, driving levels, &c., which to 20th July, 1861, is agreed, shall be called £300, as well as all expenditure, of whatever kind, to and including the date and cost of the incorporation of, and granting of the lease to the company, shall thereupon be paid to them in cash; and

3.—That 1330 paid up shares of the proposed company shall be received by the present proprietors, in the several proportions in which such are respectively interested in the present adventure for their interest therein.

4.—That dividends be payable equally upon all the shares in the company.

5.—That every shareholder shall have one vote for every share registered in his or her name.

6.—That the management shall be directed from the mines, under the advice of a consulting mining agent, who shall be responsible for all the mining operations.

The total capital of the proposed company may, therefore, be considered as represented by 10,000 shares of £1 each, of which 1330 shares will thus have been paid up, leaving 8670 shares to be allotted, and calls made thereon from time to time, as the development of the mine may appear to render the outlay of capital desirable.

Copies of the report, and plans of the sett, with further information, may be obtained from Mr. JOB, Mr. DAVID DAVIES, or Mr. RICHARD WARDMAN, all of Snailbeach, Shropshire; Messrs. PHILLIPS and DARLINGTON, 26, Gresham-street, London; or from the undersigned, to whom all applications for shares are to be made. Early applications are requested.

SAM. HARLEY KOUGH,
July 20, 1861. Shrewsbury and Church Stretton, Solicitor to the Promoters.

PNEUMATIC DESPATCH COMPANY (LIMITED).

TRIAL EXPERIMENTS AT BATTERSEA.

The public is informed that, in compliance with the numerously expressed wish to that effect, the directors have resolved to CONTINUE for some days longer the WORKING of their EXPERIMENTAL LENGTH OF TUBE AT BATTERSEA, and under arrangements which will admit of its being more generally seen. The TRIALS will accordingly be REPEATED on MONDAY NEXT, the 29th inst., and four following days, between the hours of Two and Five P.M.; and cards to view may be obtained by written application to the secretary, at the offices of the company, No. 6, Victoria-street, Westminster Abbey.—July 26, 1861. T. G. MARGARY, Secretary.

N.B. The ground can be conveniently reached from the Battersea Steam-Boat Pier, and the Battersea Station of the West End and Crystal Palace Railway Company.

COMPRESSED COAL COMPANY (LIMITED).

Incorporated under the 19th and 20th Vic., cap. 47, and 20th and 21st Vic., cap. 14, whereby the liability of the shareholders is limited to the amount subscribed.

Capital £100,000, in 50,000 shares of £2 each, with power to increase.
Deposit, 5s. per share on application, 15s. per share on allotment.

DIRECTORS.

The Hon. F. HENRY F. BERKELEY, M.P., Bristol; Victoria-square, Pimlico, S.W. (Chairman).
A. P. CLAYTON, Esq., Seven Oaks, Kent.
Sir JAMES DOMBRAIN, K.B., Dublin.
ROBERT FORD, Esq. (Messrs. Ford and Jackson), London and Milford Haven (Milford Haven, Cork, and Waterford Royal Mail Steam Packet Company).
The Lord GEORGE HILL, Ballyhare, Ramelton, Ireland.
Capt. H. J. JORDAN, The Beomonds, Cherisey.
Sir CHARLES KIRKPATRICK, Bart., of Closeburn, Dumfriesshire.
General T. E. M. MASON, Brompton, S.W.
JAMES PROTHEROE, Esq., Merchant, Bristol.
SYLVANUS PADLEY, Esq., J.P., Colliery Proprietor, Swansea.
T. W. RANKIN, Esq. (Director of the Bristol and South Wales Union Railway Company), Bristol.
WILLIAM DAVIES STEPHENS, Esq. (Messrs. Laing and Stephens), Steam Ship Owners, Newcastle-on-Tyne.

BANKERS.

Bristol and West of England .. Messrs. Stuckey's Banking Company.
London ..... The City Bank.

SOLICITORS.

London..... Thomas J. Stubbs, Esq., 46, Moorgate-street, City.
Bristol ..... Alfred Henderson, Esq.
Cardiff ..... Clement Waldron, Esq.
Swansea ..... Richard A. Essery, Esq.

BROKERS.

London..... Messrs. Froom Brothers, Change-alley, Cornhill.
Bristol ..... A. F. Morcom, Esq.
Manchester..... J. Gorton, Esq.
Dublin..... Messrs. J. and J. Stevens.
Belfast..... Messrs. Orr and Co.

CONSULTING ANALYTICAL CHEMIST.

William Herapath, Esq., F.C.S., Professor of Chemistry, Bristol.

CONSULTING MINING ENGINEER FOR WEST OF ENGLAND AND SOUTH WALES DISTRICTS.

Alexander Bassett, Esq., C.E., Cardiff.

ENGINEER—Mr. J. D. Humphreys.
SECRETARY—Mr. W. Baldock.

OFFICES,—14 AND 15, ST. SWITHIN'S LANE, LONDON, E.C.

The object of this company is to carry out the process of compressing small coal into blocks, without the admixture of extraneous cohesive matter; for this purpose the exclusive use of several valuable patents has been secured on very favourable terms.

By this process the immense quantity of slack or small coal annually wasted is rendered not only equal, but in many important points superior, to the best ordinary coal or any artificial fuel at present manufactured.

This fuel is applicable for maritime, manufacturing, and domestic purposes, and special advantages are held out to shareholders.

Applications for shares may be addressed to the secretary, brokers, and solicitors of the company, and must be accompanied either by a remittance or a banker's receipt for the amount of 5s. per share on the number of shares applied for. Three months' notice of future calls will be given.

Detailed prospectuses and all information may be obtained on application at the offices of the company.

BELL BROTHERS beg to intimate that, having become SOLE LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD of PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

DODDS' IRON AND STEEL PATENT LICENSING COMPANY (LIMITED).

This company is PREPARED to GRANT LICENSES on moderate terms for the USE of their PATENT for STEELING RAILS, POINTS, CROSSINGS, MACHINERY, and EVERY DESCRIPTION of IRONWORK.

The process, which is exceedingly reasonable in cost, and gives the most extraordinary durability to the material, has been highly approved of by the following gentlemen, firms, and companies, several of whom have extensively adopted the valuable improvement:—

ROBERT STEPHENSON, Esq.
JOHN BOURNE, Esq.
J. PERRING, Esq.
THOS. E. HARRISON, Esq.
THE GREAT INDIAN PENINSULA RAILWAY COMPANY.
THE NORTH-EASTERN RAILWAY COMPANY.
Messrs. STEPHENSON AND CO.
THE EAST LANCASHIRE RAILWAY COMPANY.
THE GREAT NORTHERN RAILWAY COMPANY.
THE MIDLAND RAILWAY COMPANY.
THE METROPOLITAN RAILWAY COMPANY have ordered a large quantity of rails by this process.

The FOLLOWING FIRMS are PREPARED to EXECUTE ORDERS under the company's patent:—

Messrs. S. BEALE AND CO., PARK GATE, ROTHERHAM.
Messrs. DODDS AND SON, ROTHERHAM.
Messrs. LOSH, WILSON, AND BELL, NEWCASTLE-ON-TYNE.
THE EBBW VALE COMPANY, SOUTH WALES.
Messrs. LEVICK AND SIMPSON, NEWPORT, MONMOUTHSHIRE.
Messrs. LLOYD, FOSTERS, AND CO., WEDNESBURY.
THE ISCA FOUNDRY COMPANY, NEWPORT, MONMOUTHSHIRE.

Applications for Licenses can be made to R. COOKE, Esq., at the company's offices, No. 7, Sise-lane, London, E.C., where also testimonials and other information may be obtained.

BRITISH AND FOREIGN STOCK, RAILWAY, AND MINING SHARES BOUGHT AND SOLD. A considerable amount of money is locked up in mining shares not prominently before the public, and consequently difficult of sale. Messrs. FULLER AND CO., 26, CHANGE ALLEY, CORNHILL, LONDON, invite the holders of such stock to communicate with them, having channels for the purchase and sale of shares of every description, independent of the mining market.

FOR SPECIAL SALE:—Messrs. FULLER and Co. have £6500 worth of shares on hand, paying regular dividends of from 12½ to 15 per cent. Also, £2750 worth of progressive shares, upon which from 200 to 300 per cent. profit may be realised in a few months, and perfectly free from risk. Full particulars may be had.

Telegraphic messages promptly attended to.
Bankers: Bank of England.

WHEAL FRANCO AND ADJOINING SETTS, IN THE TAVISTOCK DISTRICT.

MESSRS. LEIFCHILD AND SON have received instructions to OFFER FOR SALE, BY PUBLIC AUCTION, at Garraway's Coffee House, Cornhill, London, on Thursday, the 1st day of August, 1861, at Twelve for One o'clock precisely, all those VALUABLE MINING SETTS, now known by the name of WHEAL FRANCO, situate in the parishes of Buckland Monachorum and Walkhampton, Devon, chiefly held under leases for terms of 21 years, about half of which are unexpired, from the late Sir Ralph Lopes, Bart., under favourable dues and conditions, together with the MACHINERY hereinafter described.

These setts embrace a very large area on the course of several well-known lodes, from which £25,000 worth of copper ore has been sold within the last ten years, and from the western part large profits were realised and divided amongst the shareholders. The limits of these setts are in the immediate vicinity of North Wheal Robert, Sortridge Consols, Furze Hill Wood, Devon Poldice, and other promising adventures, and are in the midst of a rich mining district.

Part of one of the setts adjoins Furze Hill Wood Mine, the lodes in which are a continuation of those running through this sett, and the recent discovery of tin ore in Furze Hill Wood Mine is not above 30 fms. from its boundary.

The engine-shaft in the present workings has been sunk 122 fms., and nine levels driven east and west for a great number of fathoms, and there is an abundant water supply, which the land owner, Sir Massey Lopes, Bart., has granted at a low rental.

It is the opinion of experienced miners that the large returns of copper ores from, and the general appearance of the lode at the shallow levels, fully warrant the belief that it will be very productive at deeper levels.

The bankruptcy of a very large shareholder, the death of some, and other circumstances have reduced the share list to less than 500, the holders of which have, therefore, determined to sell the setts and materials rather than subscribe a sufficient capital upon the present small number of shares, so as to effect the works recommended for the perfect trial of these setts.

The materials consist of an engine-wheel, 36 ft. by 5 ft. 6 in. wide; 135 fms. rods, bobs, capstan and sheavs, 120 fms. capstan rope, drawing machine, with water-wheel 19 ft. by 6 ft., 150 fms. chain, and pullies, pumps, crusher, with water-wheel 22 feet by 4 ft., stamps, railroads, wagons, dressing-sheds, and machinery; carpenter's shop, blacksmith's shop, and a quantity of other useful materials necessary for the development of a large mine. An excellent account-house and agent's residence are built on the mine, and the whole property is adjacent to the Horrabridge Station of the South Devon and Tavistock Railway, which affords great advantages for the conveyance of materials and ores to and from the mines.

For viewing, apply to CAPT. LEAN, on the mine; and for particulars and conditions of sale, application may be made to the auctioneers, at 62, Moorgate-street, E.C.; or to Mr. BRIDGMAN, solicitor, Tavistock, at either of whose offices a plan of the setts can be seen.—Dated Tavistock, July 8, 1861.

SALE OF MINING SHARES.

RHEIDOL UNITED MINES, NEAR DEVIL'S BRIDGE, CARDIGANSHIRE.

MESSRS. C. AND H. GILLARD are instructed to SELL, BY AUCTION, at the Swan Hotel, Stafford, on the 5th day of August next, at Four o'clock in the afternoon, the following SHARES in the above company:—

LOT 1.—THREE HUNDRED AND SEVEN SHARES.
LOT 2.—EIGHTY SHARES.
LOT 3.—THIRTY SHARES.
LOT 4.—TWENTY-FIVE SHARES.

These shares will be sold on the condition that 3s. per share of the purchase money be appropriated for the payment of the calls now due and in arrear upon them, and the purchaser will incur no expense whatever in conveyance.

LARGE SALE OF SURPLUS COLLIERY PLANT, LOOSE STOCK, TOOLS, &c., AT THE CHARITY COLLIERY, BEDWORTH, NEAR COVENTRY.

MESSRS. BROWN AND SUFFOLK are instructed by the Governors of Bedworth Charity to arrange FOR SALE, BY AUCTION, on Monday, August 5, 1861, and following days, the SURPLUS PLANT and STOCK at the above works, comprising FOUR STEAM ENGINES of 70 and 25 horse and less power (two nearly new), THREE BOILERS, engine-house, chimney stack and boiler seating, powerful shearing and punching machines, lathes, 16 in. and other working barrels (Coalbrook Dale casting), with clack pieces and trees to match, several hundred feet of 6, 7, 8 in., and larger castings, flat and round pit and hill chains, ropes and pulleys, and nearly 100 tons of useful castings and broken metal; blacksmiths' forges, bellows, anvils, and tools; bridge, flange, and other rails and sleepers; trucks, skips, oils, tar, grease, nails; well seasoned wheelwrights' timber, in oak, ash, and elm boards, planks, squares, scantlings, felloes, hobs, spokes, truck and wagon stuffs; coal boats; large sized and smaller glazed sanitary pipes, junction bends, &c., plain and ornamental blue bricks and tiles, and a large number of miscellaneous articles, described in catalogues to be had of Mr. STARKEY, at the colliery office, and of the auctioneers, Coventry.

Sale to commence at Eleven o'clock each morning.

VALUABLE MINE MATERIALS FOR SALE.

MR. WILLIAM HANCOCK WILL SELL, BY AUCTION, on Wednesday, the 7th day of August, 1861, at Eleven o'clock in the forenoon, at ST. DENNIS CONSOLS MINES, in the parish of St. Dennis, near St. Austell, Cornwall, the VALUABLE MACHINERY and MATERIALS thereon, comprising—

ONE 46 in. cylinder ROTATORY ENGINE, with TWO BOILERS, nearly new, about 20 tons.

TWO FLY WHEELS, with shafts, plummer blocks, &c., complete, about 26 tons.
TWO 9 ft. FLY WHEELS for pumping, with brasses, plummer blocks, &c. Four cast-iron stamps' axles attached, with 40 heads, frames, and lifters complete.

11 9 ft. 8 in. pumps.
13 9 ft. 9 in. ditto.
1 9 ft. 12 in. ditto.
1 10 ft. 8 in. plunger pole, with case, and stuffing box and gland.
1 10 ft. 8¼ in. working barrel.
1 12 ft. 8¼ in. ditto.
1 6 ft. 8 in. windbore.
1 9 ft. 8 in. ditto.
1 9 ft. 7 in. ditto.
1 each 12 in., 9 in., and 8 in. matching pieces.
1 7½ ft. 10½ in. doorpiece.
1 2 ft. 9 in. 8 in. top door and doorpiece.
1 2 ft. 9 in. 8 in. H piece.
Capstan and sheavs.
80 fms. of 1⅛ & 1½ in. iron bucket rods.
3 horse whims.
30 fms. of shaft rods, 9 in. by 7 in.

Balance bob, with strapping plates complete; several pairs of connecting plates and strapping plates; several flat-rod, whim, and other sheaves; several tons of chain, ⅜, ½, ⅝, and 1 in.; iron and wood tram wagons, railroad iron and saddles, tram wagon wheels, staples, glands, and yokes; plummer blocks, steam pipes, large pair treble blocks, small pair treble blocks, winch, flange pins, rod pins, bolts and burs, clack and bucket seatings, 10 in., 9 in., and 8 in. buckets; ladders, 50 fms. of 7 in. and other launders, 100 fms. 5 in. wood pipes, 42 in. and 34 in. smiths' bellows, 1 portable bellows, anvils, smiths' crane, taps and plates, screwing and punching tools, smiths and miners' tools, 2 in. drop screws, spanners, beams, scales, and weights; crosscut and other saws, cistern, boiler plates, large quantity of new and old iron, lifting jack, brass bell with stand, all the materials of the tin-dressing floors and tools, with sieves, large tin chest, grinding stone, carpenters' benches, 36 tons of coal, 11 dozen miners' candles, powder, safety-fuse, powder cans, new timber and plank, new cofer plates and grate frames, grate plates, stamps' guides, cams, iron lifters, large new crank, cog wheels, wheelbarrows, hemp, leather, tallow, oil, tar, nails of different sizes, shovels, hilts, miners' chests, cast-steel borers, crate of window glass, quantity of wrought and cast scrap iron, old and new brass, lead, &c.: 62 reed covering frames for china-clay, mica pits, 2 new china-clay sheds, 40 ft. by 20 ft., with slated roofs; a quantity of useful timber, in lots; a Whitechapel spring cart and harness, saddle and bridle, cart and harness, and the whole of the account-house furniture.

Also, the LEASE of the MINE, held for a term of 21 years, from 26th December, 1859, at 1-20th dues; and the LEASE of the CHINA CLAY and STONE WORKS, held for the same term, at the dues of 1s. per ton on 500 tons and upwards, with a minimum rent of £25 per annum.

WILLIAM HANCOCK, Auctioneer.
Dated July 23, 1861. Agent to the Royal Exchange Assurance Corporation.

TO IRONMASTERS AND OTHERS.

MR. THOMAS WATKINS is instructed to SELL, BY PUBLIC AUCTION, on Thursday, the 8th day of August next, at Twelve o'clock at noon, at the Cardiff Arms Hotel, in the town of Cardiff, the VALUABLE HEMATITE IRON ORE MINE and WORKS on the LLWYNSAER PROPERTY, in the parish of LLANTRISSANT.

The existence of ore has been proved to the extent of about 100 yards, and so far the trials appear to be most favourable. The ore is found near to the surface, the quality is good, and the percentage of iron large. The ore has been proved at several points.

A pit has been sunk 6 ft. in depth, into 4 ft. of ore; another pit 9 ft. in depth, 1 ft. into the ore; another pit 10 ft. into the ore; and another pit 7 ft. into the ore. In all those pits the thickness and depth of the ore have not been proved, and judging from the ferruginous nature of the ground the depth of ore is considerable.

A steam-engine of 20 horse power, and all the necessary pumping and winding apparatus, have been erected, by which a purchaser may at once commence working the ore and sending it to market.

The Mwyndy branch of the Ely Valley Railway is now being constructed over the property in question, within 150 yards of the iron ore, by which the ore may be sent to all the ironworks with the greatest facility.

The property is in extent 36 acres, and is held under lease for the term of 60 years, from the 9th day of May, 1860, on favourable terms.

For further particulars and lithographed plans, apply to Messrs. DALTON and SPENCER, solicitors, Cardiff; or to the auctioneer, at his offices, Cardiff.

VALUABLE and IMPORTANT ESTATE, containing about 225 acres, at HEDNESFORD and LEACROFT, in the PARISH of CANNOCK, STAFFORDSHIRE, including the celebrated HOTEL, the "CROSS KEYS," at Hednesford, HOUSES, and OTHER BUILDINGS in the village, and LANDS immediately in connection with and adjoining to the Hednesford New Colliery, the Cannock Mineral Railway, and the canal wharf and tramway now in course of formation by the Birmingham Canal Company.

MESSRS. E. AND C. ROBINS WILL SELL, BY AUCTION, on Wednesday, the 21st day of August next, at the Swan Hotel, Wolverhampton, at Four o'clock in the afternoon, the VALUABLE ESTATE, called the "CROSS KEYS," at HEDNESFORD, the principal part whereof is freehold and a small portion copyhold, containing about 225 acres, including the HOTEL, TRAINING STABLES, FARM and OTHER BUILDINGS, occupied by Mr. John Wilkins and others. Also, various HOUSES, TRAINING STABLES, OTHER BUILDINGS, and LANDS in and about the village, and extending from the Cross Keys Hotel and Mr. Pigott's Hednesford New Colliery to the line of the Cannock Mineral Railway. The high road from Cannock to Rugeley passes through the estate.

The recently-constructed railways and canals have already advanced the neighbourhood, and occasioned an extensive application of land for villa and general building purposes. Public works in contemplation will confer still further benefits. The large quantity of coal raised on Cannock Chase, and particularly at Mr. Pigott's Hednesford New Colliery, adjoining this property, clearly indicates the existence of mines in the estate, and experienced practical miners have reported them of unquestionable quality and great value.

The enclosure of the wastes now in progress will, as in the case of other parishes that have already been enclosed, most materially alter and improve the character and value of the district. The estate will be first offered in one lot, but if not sold, will be immediately put up in about nine lots.

Particulars, with plans and conditions of sale, will speedily be prepared, and may be procured from Messrs. BARKER, BOWKER, and PEAKE, solicitors, 1, Gray's Inn-square, London; Mr. PEAKE, land agent, Chartley Manor-house, near Stafford; Mr. BAILEY, mineral agent, the Pleck, near Walsall; at the Cross Keys at Hednesford; the Swan Hotel, Wolverhampton; and from E. and C. ROBINS, surveyors and auctioneers, New-street, Birmingham.

WEST MERLLYN MINE, HOLYWELL, FLINTSHIRE.

TO BE SOLD, BY AUCTION, at the King's Head Hotel, Holywell, on Friday, the 9th day of August, 1861, at Six o'clock in the evening, the WHOLE of this VALUABLE LEAD MINE, within and under 124 acres of land, in the parish of Whitford, in the county of Flint. It is held at a royalty of 20s. per ton, for a term of 21 years, of which 20 years are unexpired, and is likely to be very productive. About 10 tons of lead is in course of dressing, and will be sold on the 8th August next. The present appearances of the lodes underground are highly encouraging. A good smithy, carpenters' shop, together with office and store room, are erected, with a lot of valuable plant, &c., on the mine.

For further particulars, apply to Capt. J. TREVETHAN, or Mr. HARRISON, solicitor, both of Holywell.—July 25, 1861.

PRELIMINARY NOTICE.

TO BE SOLD, BY AUCTION, at the BALLYVIRGIN MINE, county of Clare, Ireland, in the month of August, a first-rate 20 in. cylinder HORIZONTAL CONDENSING STEAM ENGINE, with a 7 tons boiler and outfit, complete; a CRUSHER, having 24 in. diameter rolls, and connections for same; a HAULING MACHINE and connections, and pumping connections; by the eminent engineers Messrs. Nicholls, Williams, and Co., Bedford Foundry, Tavistock. The above engine is in perfect order, and has not been much more than two years in use.

There will be also SOLD the WHOLE of the MINING APPARATUS, consisting of several pumps and general mining machinery, particulars of which will be duly published prior to sale.

Tenders for the purchase of the engine will be received by E. PYCROFT, Esq., 3, Pinner's-court, Old Broad-street, London; by the agent, Mr. THOMAS DE LA HUNTY, Ballyvirgin Mine, Ennis; and by Mr. RICH. PIERSON, auctioneer, Ennis. Ballyvirgin Mine is midway between Ennis and Tulla, in the county of Clare.—Ennis, July 22, 1861.

MESSRS. WHEATLEY KIRK AND CO., ENGINEERS, TOOL MAKERS, CONTRACTORS, &c., tender their best thanks to their numerous friends and customers, at home and abroad, for their liberal patronage for so many years past, and have now the honour to announce their REMOVAL from their old premises, Cross-street, to their new premises, works, offices, &c., called the ARCHIMEDEAN WORKS, ALBERT STREET, ST. MARY'S MANCHESTER (late Messrs. Barton's Copper Works), where they are determined to exercise their utmost endeavours in the execution of all orders committed to their charge, with economy, punctuality, and dispatch.

N.B.—Their Weekly Circular is published as usual, and may be had on application gratuitously, or by post for a stamp.

Archimedean Works, Albert-street, St. Mary's, Manchester, July 18, 1861.

WHEATLEY KIRK tenders his grateful acknowledgements to his numerous and influential clients for their past favours committed to his charge, for upwards of 20 years, in his professional capacity of valuer, auctioneer, &c., and respectfully notifies his REMOVAL from his old chambers, Cross-street, to a more commodious suite of offices, attached to the works of Messrs. Wheatley Kirk and Co., Engineers, &c., ALBERT STREET, ST. MARY'S, where he intends to prosecute his professional labours in all matters, whether of consultation, arbitration, valuation, or sale (by auction or private contract), agency or otherwise, appertaining to railway property, machinery, engineering, works, mills, factories, mining, estates, patents, partnerships, &c.

Albert-street, St. Mary's, Manchester, July 18, 1861.

NEW 14 in. DOUBLE GEARED SCREW CUTTING LATHE, 20 ft. bed, including slide rest for turning cones, surfaces, &c., traversing stay, 20 change wheels, large face plate and driver, top driving apparatus, &c.—WHEATLEY KIRK and Co., Engineers, Manchester.

CARNARVONSHIRE, NORTH WALES.—A SLATE QUARRY or QUARRIES TO BE DISPOSED OF, on reasonable terms. There are three different veins running through the property, where slates of the first quality can be got out at a very small expense, when compared with the thousands that are laid out at places before any slates are ready for market. A mere trifle will be required for road making, and only about seven miles from the shipping port of Carnarvon. Carriage, about 3s. 8d. per ton, along a tramroad down to the port.—For further particulars, apply to GRIFFITH JONES, Pencaenewydd, Tremadock, Carnarvon.

LEAD MINES IN MERIONETHSHIRE.—Some VALUABLE LEAD MINES are OFFERED FOR LEASE, upon highly favourable terms. There are THREE LEAD MINES beneath the farms of Tyddyn-y-Priddell, Bryn-dinas Dyffryn-gwyn, and Raitilwyd, in Merionethshire, which are offered for 21 years, for £2000 and a royalty of £1 per ton. The ladies who own the mines have exhausted their capital, and are consequently unable to extend the level, which was commenced and had nearly reached the lode before their father's death. Already 100 tons of ore have been raised from the mine, although the deepest winze is but 15 fms. Lead ore has been discovered for a length of 400 or 500 fms., and no doubt is entertained that with a good trial the mines will turn out well.—Apply to Miss MORRIS, Maengwyn-street, Machynlleth; or to Capt. W. WILLIAMS, Ponterwyd, near Aberystwith.

NEW COLLIERY, NAILSEA, NEAR BRISTOL.—FOR SALE, BY PRIVATE CONTRACT, the WHOLE of the PLANT and MATERIALS at the above colliery, comprising—

ONE HIGH PRESSURE DIRECT ACTING PUMPING ENGINE, cylinder 45 in. in diameter, and 10 ft. stroke.
ONE HIGH PRESSURE WINDING ENGINE and gear, cylinder 12 in. diameter.
ONE HIGH PRESSURE WINDING ENGINE, cylinder 16 in. diameter.
THREE CYLINDRICAL BOILERS, 41 ft. by 6 ft.
ONE CYLINDRICAL BOILER, 18 ft. by 4 ft.
ONE CYLINDRICAL BOILER, 20 ft. by 3 ft. 6 in.

Hammered iron pumping cranks, T bobs, 19 in., 14½ in., 5½ in., 5 in., and 4½ in. forcing, lifting, and hand pumps; hammered iron straps, double straps and tail joints, buckets, clacks, wrought-iron cistern, lifting screws, chains, large capstan, double-power crab winch, 80 fms. 10¼ capstan rope, 8 in. capstan and other ropes, blocks, boring tools, wrought-iron air pipes, tram plates, smiths' bellows and tools, wagons, carts, &c.

To view, apply at the colliery; and for all further particulars, to BODDAM CASTLE, Esq., No. 29, Corn-street, Bristol.

DERBYSHIRE.

THE ALDERWASLEY FORGE AND WORKS, NEAR THE AMBERGATE STATION ON THE MIDLAND RAILWAY.—TO BE LET, on a lease for 7, 14, or 21 years, and may be entered upon immediately, the above-mentioned FORGE and WORKS, with the STORE ROOMS, OFFICES and BUILDINGS, ROLLING and SLITTING MILLS, on the banks of the River Derwent, in the liberty of Alderwasley, and the WATER-WHEELS of 70 horse power and MACHINERY belonging thereto, late in the occupation of Messrs. Mold, who for nearly 50 years carried on a lucrative and extensive business as ironmasters at the said works, together with a newly-erected MESSUAGE, or DWELLING HOUSE, very pleasantly situated near the said works, with the green-house, stables, coach-house, and capital garden belonging thereto, and upwards of 30 acres of excellent land, and 15 workmen's houses and counting-house, near or contiguous to the works.

The works are situated within half a mile of the Ambergate station on the Midland Railway, and the Cromford and Belper turnpike-road, the branch railway from Ambergate to Rowsley (on which there is a siding and wharf for the use of the works), and the Cromford Canal (attached to which is a wharf also for the use of the works), are all parallel therewith and immediately contiguous thereto, and afford excellent railway and canal transit to and from London, Leeds, Nottingham, Derby, and all parts of the kingdom; and the extension of the railway from Rowsley to Buxton, now in progress, will give a direct communication with Manchester, Liverpool, &c.

The works are also available for saw-mills on an extensive scale, or for any other purpose requiring power and facility of transit.

For further particulars, and to treat, application may be made to Messrs. WOODHOUSE and JEFFCOCK, civil and mining engineers, Derby; or at the offices of Messrs. NEWBOLD and SON, solicitors, Matlock, from whom tickets may be obtained to inspect the works.

SLATE QUARRIES, IRELAND, TO BE LET, OR SOLD, by the owners in fee. Slates of bluish colour, and fine grained metal veins, inexhaustible. Constant water-power. Paying at present 30 per cent. Present samples equal to any Welsh. Situate four miles from Carrick-on-Suir (to which place the River Suir is navigable for vessels of 200 tons), and the railroad station 14 miles from the city of Waterford.—Apply to WM. DESPARD, Corraiganore, Waterford.

TO BE LET, ON LEASE, the TRELOGAN MINES, FLINTSHIRE.—The above well-known lead mines are now open to capitalists for such a term of years as may be determined on. The territory consists of an extensive range belonging to the Viscount Fielding, Sir Pyers Mostyn, Bart., and Thomas L. Longueville, Esq., comprising in all an extent of 500 acres or more, as may be agreed upon. The lease of the adjoining mineral ground, belonging to the Crown, and containing about 56 acres, will expire at Michaelmas, 1862, when it is understood that the Commissioners of Woods, &c., will be disposed to negociate for the grant of a fresh lease, to such responsible persons as may be in possession of the adjacent mining ground.

None but persons of respectability, and possessed of ample means, will be treated with.

Applications may be addressed to JOHN DAWSON, Esq., Gronant Ehyl, North Wales; and EDWARD JONES, Esq., Pendre, Holywell, North Wales.

Communications respecting the Crown land may be addressed to the Hon. J. R. HOWARD, Office of Woods, &c., Whitehall-place, London, S.W.—July, 1861.

HORIZONTAL STEAM ENGINES FOR SALE, one each of 14, 17, and 20 in. cylinders, 36 in. stroke, quite new. They are especially adapted for mining purposes, and are very substantially made. Also, several of from 6 to 8 horse power.—Apply to Messrs. E. PAGE and Co., Engineers, Laurence Pountney-place, Laurence Pountney-hill, Cannon-street, E.C.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL. | OXIDE OF COBALT. [WIRE, &c.
REFINED METALLIC BISMUTH. | GERMAN SILVER—IN INGOTS, SHEET

NICKEL AND COBALT ORES PURCHASED.

TO ADVENTURERS IN FOREIGN MINES.—MR. HARRY THOMAS VERRAN, of PLACENTIA, NEWFOUNDLAND, who has had considerable experience (under the tuition of his father, and in connection with many other experienced Mining Engineers) is ready to UNDERTAKE the EXAMINATION and REPORTING upon MINERAL PROPERTIES in Newfoundland, the United States, or any other country, where his services may prove useful to capitalists. The greatest confidence may be placed in Mr. VERRAN, who will use his best judgment in giving reliable information to those who may repose confidence in him.

TO CAPITALISTS.—Messrs. LEICESTER AND CO., INSPECTORS and VALUERS of MINES, &c., MELBOURNE, VICTORIA, OFFER THEIR SERVICES to SELECT and INVEST CAPITAL in MINING PROPERTIES, for which they charge 2½ per cent.; and they also COLLECT and TRANSMIT the DIVIDENDS, charging £5 per cent. on their amount. Messrs. LEICESTER and Co. earnestly call the attention of capitalists to the many opportunities they possess of investing, to pay from £50 to £150 per cent. per annum. Sums under £50 will be charged extra. All remittances must be made through our agent, Mr. RICHARD MIDDLETON, *Mining Journal* office, 26, Fleet-street, London; or direct through our bankers, the Union Bank of Australia.

BEDFORD IRONWORKS, TAVISTOCK.

NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE, including ironwork for a water-wheel, 40 ft. diameter, 2½ ft. breast. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description. 99

PATENT BITUMINIZED GAS, WATER, AND DRAINAGE PIPES.—These PIPES POSSESS all the PROPERTIES NECESSARY for the CONVEYANCE of GAS and WATER, and also for DRAINAGE PURPOSES—viz., GREAT STRENGTH, GREAT DURABILITY, and PERFECT INOXIDABILITY, and being non-conductors are not affected by frost, like metal pipes. They are proved to resist a pressure of 220 lbs. on the square inch (equal to 500 ft. head of water), are only one-fourth the weight, and considerably cheaper than iron pipes. They are made in 7 ft. lengths, and the joinings are simple and inexpensive. These pipes have been in use in France, Spain, and Italy nearly three years, where the demand for them is very great. The opinions of the press on a public test at the Houses of Parliament, before a large number of engineers and other scientific gentlemen, may be had, with further particulars, at the office of the company, on application to Mr. ALEX. YOUNG, 14A, Cannon-street, London, E.C., where sample pipes may be obtained for trial. 100

INCRUSTATION OF STEAM BOILERS.—EASTON'S PATENT BOILER FLUID EFFECTUALLY REMOVES and PREVENTS INCRUSTATION in STEAM BOILERS, WITHOUT INJURY to the METAL, with GREAT SAVING in FUEL, and with LESS LIABILITY to ACCIDENT from EXPLOSION. It is used by Her Majesty's Steam Storeships, Woolwich Arsenal, Honourable Corporation of Trinity House, Tower of London, India Store Department, by the principal Steam Packet Companies of London, Liverpool, Southampton, Hull, &c., and by engineers, builders, railway companies, and manufacturers throughout the country. Testimonials from eminent engineers, boiler makers, and manufacturers, with full particulars, will be forwarded on application to P. S. EASTON and G. SPRINGFIELD, sole manufacturers and patentees, Nos. 37, 38, and 39, Wapping-wall, London, E.

AGENTS IN GREAT BRITAIN.

Aberdeen, Mr. James F. Wood.
Alston-under-Lyne, Mr. S. G. Fielden.
Belfast, Mr. W. T. Mattier, C.E.
Birmingham, Mr. Adam Dixon.
Chester, Mr. W. A. Rowland.
Devonport, Mr. Cornelius Boolds.
Dublin, Mr. Wm. Fith.
Frome, Mr. W. B. Harvey, Chemist.
Glasgow, Mr. W. Mutrie.
Hartlepool, Mr. W. T. Cheesman, West Hartlepool.
Hull, Messrs. A. L. Fleming and Co.
Leeds, Mr. J. C. P. Westwood.
Leicester, Mr. Benjamin Pochin.
Liverpool, Mr. J. McInnes.
Manchester, Messrs. Morris and Sutton, Princess Chambers.
Nottingham, Mr. G. D. Hughes.
Oldbury, Mr. C. Tonge, Chemist.
Southampton, Mr. Joseph Clark.
Southsea, Mr. T. Cheesman.
Tralee, Mr. H. Benner.
Wexford, Mr. Thomas Waring.

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Rio de Janeiro, Messrs. Miers Brothers and Maylor, Engineers.
Odessa and South Russia, Mr. W. Baxter, Engineer, Nicolaeff.
Belgium, Messrs. Breuls Brothers, Engineers, Antwerp.
Holland, Mr. Jos. Couriander, the Hague. 101

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall 102

MESSRS. W. BRUNTON AND CO. have great pleasure in informing their customers and friends, and the mining community, that they have RESUMED MANUFACTURING, at their PENHELLICK WORKS, POOL, near CAMBORNE, and are PREPARED as before to SUPPLY SAFETY FUSE of a QUALITY which CANNOT BE SURPASSED.
BRANCH WORKS, BRYMBO, NEAR WREXHAM. 103

BASTIER'S PATENT CHAIN PUMP, APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus sand mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the USE of his INVENTION.
OFFICES, 19, MANCHESTER BUILDINGS, WESTMINSTER, LONDON. 104
London, Oct. 10, 1859. Hours, from Ten till Four. J. U. BASTIER, C.E.

ALBERT AND MEDICAL LIFE ASSURANCE,
7, WATERLOO PLACE, PALL MALL, LONDON, S. W.
ESTABLISHED 1838.

The business of the Medical, Invalid, and General Life Assurance Society having been amalgamated with the Albert Life Assurance Company, the united business will henceforth be carried on under the above title.

Accumulated fund exceeds	£500,000
Subscribed capital	447,180
Paid-up capital	137,000
Annual income from life premiums, upwards of	220,000

The new business is now progressing at the rate of more than £25,000 per annum. 104
From Prof. De Morgan's report upon the last valuation of liabilities (end of 1858), and the statements of accounts, it appeared at that time that the surplus in favour of the Albert business alone, after providing for every liability, was £192,925 2s. 11d.
HENRY WILLIAM SMITH, Actuary.
C. DOUGLAS SINGER, Sec.

INVESTMENTS IN BRITISH MINES.—MR. MURCHISON publishes a QUARTERLY REVIEW OF BRITISH MINING, giving at the same time the POSITION and PROSPECTS of the MINES at the end of each Quarter, the DIVIDENDS PAID, &c.; price One Shilling. RELIABLE INFORMATION and ADVICE will at any time be given by Mr. MURCHISON, either personally or by letter, at his Offices, No. 117, BISHOPSGATE-STREET WITHIN, LONDON, where copies of the above publication can be obtained.

OPINIONS OF THE PRESS ON MR. MURCHISON'S WORK ON BRITISH MINING, PUBLISHED IN 1856.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal.*
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This is really a practical work for the capitalist.—*Stockport Advertiser.*
This work enables the capitalist to invest on sound principles; in truth, it is an excellent guide.—*Plymouth Journal.*
All who have invested, or intend to invest, in mines, would do well to consult this very useful work.—*Ipswich Express.*
Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—*Warwick Advertiser.*
We believe a more useful publication, or one more to be depended on, cannot be found.—*Plymouth Herald.*
Those interested in mining affairs, or who are desirous of becoming speculators should obtain and carefully peruse the work.—*Monmouth Beacon.*
With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald.*
Every person connected, or who thinks of connecting himself, with mining speculations should possess himself of this book.—*North Wales Chronicle.*
A very valuable book.—*Cornwall Gazette.* [*Glasgow Examiner.*
All who have invested, or intend to invest, in mines should peruse this able work. Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner.*
It is full of carefully compiled and reliable information relative to all the known mines of the United Kingdom.—*Sheffield Free Press*
Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express.*
Of great value to capitalists.—*Sunderland Times.* 106

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning, price 1d.
The best medium for mining, manufacturing, shipping, and trading advertisements in the North of England.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland. 107

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.,
MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE. 108

THE RAILWAY CARRIAGE COMPANY,
OLDBURY, NEAR BIRMINGHAM.
MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK.
NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK FOR SALE OR HIRE.
LONDON OFFICES,—No. 1, MOORGATE. 109

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS
RAILWAY WAGONS FOR HIRE.
Apply to the SECRETARY, 3, Newhall-street, Birmingham. 110

JAMES RUSSELL AND SONS, CROWN TUBE WORKS,
WEDNESBURY, STAFFORDSHIRE.
WAREHOUSE,—81, UPPER GROUND STREET, BLACKFRIARS, LONDON, S.
The Original Inventors and First Manufacturers of the Patent Wrought-Iron Tubes for Gas, Steam, Water, &c. Enamelled Tubing, and Glazed ditto. Russell and Howell's Homogeneous Tubes. And agents for G. F. Muntz's Solid Brass Tubes. Every variety of fittings. Trade mark, 111

LLOYD AND LLOYD, ALBION TUBE WORKS,
BIRMINGHAM,
MANUFACTURERS OF PATENT LAP-WELDED IRON TUBES, FOR LOCOMOTIVE, MARINE, AND STATIONARY BOILERS.
IMPROVED HOMOGENEOUS METAL TUBES.
ALL DESCRIPTIONS OF TUBES AND FITTINGS FOR GAS, STEAM AND WATER, PLAIN, GALVANISED AND ENAMELLED.
GUN-METAL STEAM GLAND COCKS, WATER GAUGES, &c. 112

SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London. 113

FARRAR'S PATENT STEEL COMPANY,
WARDSEND STEEL WORKS, SHEFFIELD, MANUFACTURERS of BEST CAST STEEL, MALLEABLE and MILD STEEL CASTINGS, SUPERIOR CAST-STEEL FILES, &c., CALL the ATTENTION of ENGINEERS and all users of FIRST-CLASS STEEL to the GREAT SUPERIORITY of STEEL MANUFACTURED under this PATENT. Prices:—

First quality	£50 per ton.
Second quality	40 „
Third quality	30 „

FARRAR'S PATENT STEEL CO. TRADE MARK.
Manufactory, Wardsend Steel Works, SHEFFIELD.
LONDON OFFICE, 21, BOW LANE, CANNON STREET WEST, E.C.,
Where all communications are to be addressed. 114

CORNISH BORER STEEL.—Upwards of ONE HUNDRED AND SIXTY MINES are SUPPLIED with this STEEL, and the DEMAND for it is RAPIDLY INCREASING.—For terms, apply to R. MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire.
London Agent:—Mr. W. T. HENDRY, 71, Cannon-street West, E.C. 116

TO COAL OWNERS AND COKE BURNERS.

MACKWORTH'S PATENT COAL WASHER, OR PURIFIER.—This MACHINE will EXTRACT the SHALE and ALL HEAVY IMPURITIES from SMALL COAL at a COST of TWOPENCE PER TON.—For particulars and references, apply to the makers, A. and T. FRY, Temple-gate Works, Bristol; or to Mr. Jos. RIDER, Basinghall-street, Leeds. 117

COALS.—GEORGE J. COCKERELL AND CO.,
Coal Merchants to Her Majesty. Cash, 25s. per ton. Best coals only. 118

GEORGE J. COCKERELL AND CO.,
Central Office, 13, Cornhill, E.C.

GEORGE J. COCKERELL AND CO.,
Eaton Wharf, Grosvenor Canal, and Office, 1A, Lower Belgrave-place, Pimlico, S.W.

GEORGE J. COCKERELL AND CO.,
Purfleet Wharf, Earl-street, Blackfriars, E.C.

GEORGE J. COCKERELL AND CO.,
Sunderland Wharf, Peckham Canal, S.E.

WIRE-ROPE TESTING.

PUBLIC TEST of A. J. HUTCHINGS AND CO.'S PATENT WIRE-ROPE at LIVERPOOL, FEBRUARY 27, 1861.
[From the *Daily Post* of March 1, 1861.]

On Wednesday, the 27th of February, a series of EXPERIMENTS on WIRE-ROPE took place at the Corporation Testing Works, King's Dock. The specimens tested were manufactured by the well-known firm of A. J. HUTCHINGS and Co., of Millwall, London, the Contractors to the Lords of the Admiralty and various foreign Governments, the character of whose rope is so well known in this country, as well as all parts of the Continent. Capt. Ducraft, of H.M.S. *Hastings*, and a number of other gentlemen connected with shipping, were present to witness the experiments, all of which were considered highly satisfactory, and in every respect sustained the reputation of the manufacturers. The following are the results of the experiments:—

An 8 in. rope bore 70 tons WITHOUT BREAKING.
Circumference and breaking strain.

2¼	2½	3	3¼	3⅝	4	4½
10¾ tons	14 tons	20 tons	27 tons	29 tons	32¾ tons	45½ tons

N.B.—The 2¼, 3, and 4 in. ropes were the sizes actually tested. The remaining sizes and strains are comparative. 115

THE ABOVE ROPES ARE FOR COLLIERY USE.

Size. Inches.	Hutchings and Co.'s wire-rope for ships' rigging. Tested Feb. 27, 1861.	Newall and Co.'s Test of Oct. 29, 1860.	Garnock, Bibby, and Co.'s Test, Oct. 29, 1860.
2	5 tons 15 cwts.	—	—
2¼	11 „ 14 „	7 tons 15 cwts.	8 tons 16 cwts.
3⅜	16 „ 10 „	—	—
3½	22 „ 8 „	—	18 „ 5 „
3⅝	23 „ 10 „	16 „ 10 „	—
4	29 „ 10 „	18 „ 15 „	—
4½	37 „ 15 „	—	26 „ 10 „

N.B.—The 2, 3⅜, and 4 in. ropes were the actual sizes tested. The remaining sizes and strains are comparative.
The above tests certified by Mr. M'Donald the Superintendent of the Corporation Testing Works, Liverpool.

GARNOCK, BIBBY, AND CO.,
MANUFACTURERS OF HEMP AND MANILLA CORDAGE, AND IMPROVED PATENT NON-TWISTED WIRE-ROPE,
CHAPEL STREET, LIVERPOOL.

G. B. & Co. beg to intimate that they use nothing but Bradley's long-drawn charcoal wire in the manufacture of pit and incline ropes. The quality of this article is well-known, and its superiority was fully proved at a PUBLIC TEST of WIRE ROPE, instituted by Messrs. R. S. Newall and Co., at Liverpool, on October 29th, 1860, on which occasion G. B. and Co.'s samples averaged 13 per cent. over their trade card, and were the strongest of all the samples from various manufacturers then tested.—See *Mining Journal*, Oct. 29, 1860. 119

HEMP AND WIRE-ROPES.

JOHN STEPHENS AND SON, HEMP AND WIRE-ROPE WORKS, ASHFIELD, FALMOUTH, CORNWALL,
MANUFACTURERS of FLAT and ROUND HEMP and WIRE-ROPES, GUIDE RODS for SHAFTS, GALVANISED WIRE SIGNAL LINE and STRAND FENCING, &c., for MINES, RAILWAYS, &c.
A first-class medal was awarded to JOHN STEPHENS and SON for their manufactures, by the Royal Cornwall Polytechnic Society, in 1860. 120

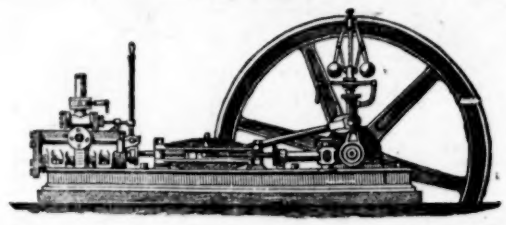
PATENT LEVER BREAK, FOR RAILWAY WAGONS, doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 34, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent. 121

ASSAY OFFICE AND LABORATORIES,
DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT, LONDON.
Conducted by MITCHELL and RICKARD (late John Mitchell, F.C.S., Author of *Manual of Practical Assaying*, Metallurgical Papers, &c.)
Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c.
For amount of fees, apply to the office, as above. 122

EBONITE!—TELEGRAPH INSULATORS made of EBONITE. EBONITE in SHEET, TUBES, and RODS, or manufactured into various articles of utility and ornament, being calculated to supersede metal, hard woods, and ivory at present in use.
INDIA RUBBER.—INDIA RUBBER STEAM PACKING in ROPE, SHEET, RINGS, &c., intended for railway and machinery appliances, unvulcanised and vulcanised.
S. W. SILVER AND CO., 3 and 4, BISHOPSGATE WITHIN, E.C.
(Opposite the London Tavern).
WORKS—SILVERTOWN, ESSEX, opposite Her Majesty's Dockyards Woolwich. 123

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards. CORES WARRANTED to STAND the USUAL TEST for INSULATION. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.
Copper wire covered with silk, cotton, or any other material, to order. 124

MESSRS. E. PAGE AND CO.,
VICTORIA WORKS, BEDFORD,
AND LAURENCE POUNTNEY PLACE, CANNON STREET, LONDON
MANUFACTURERS OF



HIGH PRESSURE STEAM ENGINES, from 2½ to 30 horse power, and upwards, adapted for MILLS, AGRICULTURAL, MINING, and GENERAL PURPOSES. The following sizes are ready for immediate delivery, and may be seen at any time at their London depôt:—

ONE 5 in. cylinder, 10 in. stroke.	ONE 12 in. cylinder, 36 in. stroke.
TWO 8 in. cylinder, 18 in. stroke.	ONE 14 in. cylinder, 36 in. stroke.
ONE 10 in. cylinder, 18 in. stroke.	ONE 17 in. cylinder, 36 in. stroke.
ONE 14 in. cylinder, 24 in. stroke.	TWO 20 in. cylinder, 36 in. stroke.

Prices and full particulars sent on application. 125

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD,
MANUFACTURERS OF PATENT TUBULAR TUYERES.

Having been very successful in MANUFACTURING and REPAIRING the PATENT TUBULAR TUYERES, and securing our patent for a further term of years, we have great pleasure in offering them to the public, at a considerable REDUCTION IN PRICE.
Our manner of repairing will make them as LARGE and GOOD AS WHEN NEW (which is not the case with the ordinary tuyere) for half the first cost, when there is not more than two coils destroyed at the nozzle, all parties returning them carriage paid, and are confident they will be the cheapest and best ever offered to the mining world.
The PATENT TUBULAR TUYERES having maintained a most honourable reputation since their introduction, and been thoroughly proved to answer all the purposes set forth by the proprietors (when properly treated), it is, therefore, deemed unnecessary to publish a list of the patrons, or enumerate cases of their success. Although by such a procedure very much might be said in their favour, yet the readers would never be so fully convinced of their sterling worth as by a practical trial.
The future scale of prices will be as follows, including sockets:—

No. 1 Tuyere,	16 in.	long	28s. each.
No. 2 „	18 „	„	32s. „
No. 3 „	20 „	„	36s. „
No. 4 „	22 „	„	40s. „
No. 5 „	24 „	„	44s. „

Delivered at Chesterfield station. Terms, nett cash quarterly. 126

TO BRASSFOUNDERS, ENGINEERS, REFINERS, &c.— The PATENT PLUMBAGO CRUCIBLE COMPANY beg to CALL the ATTENTION of all users and shippers of melting pots to the GREAT SUPERIORITY of the PATENT CRUCIBLES, which have been used during the last three years by some of the largest melters in England and abroad. In addition to their capabilities of melting an average of from 35 to 40 pourings, they are unaffected by change of temperature, never crack, but can be used till worn out, requiring only one annealing for several days' work, and become heated much more rapidly than ordinary pots, EFFECTING thereby a SAVING of more than FIFTY PER CENT. in time, labour, fuel, and waste. The Patent Plumbago Crucible Company also manufacture and import clay crucibles, muffles, portable furnaces, sublimate pans and covers, glass pots, all descriptions of fire-standing goods, and every requisite for the assayer and dentist.

Also, sole proprietors of fine POWDERED PURE FLOUR PLUMBAGO, which they can confidently recommend for anti-friction purposes, being an impalpable powder, and warranted perfectly free from grit and any impurity. For ordinary polishing purposes it will be found superior to any of the black leads offered. Price, £27 10s. per ton; 30s. per cwt. Samples of 28 lbs. forwarded on receipt of 8s. Packages free.
For Lists, Testimonials, &c., apply to the BATTERSEA WORKS, London, S.W. 127

HALEY'S PATENT LIFTING JACK,
MANUFACTURED BY THE INVENTOR,
JOSEPH HALEY,
ALBION STREET, GAYTHORN, MANCHESTER.

SCREW JACKS, SHIP JACKS.

SLIDE AND CENTRE LATHES, PLANING, SHAPING, BORING, DRILLING SCREWING, WHEEL CUTTING, AND OTHER MACHINES.

RIVET MAKING MACHINES. 128

AUSTRALIA AND NEW ZEALAND
WHITE STAR EX-ROYAL MAIL CLIPPERS,
SAILING FROM
LIVERPOOL to MELBOURNE on the 1st and 20th of every month.
*** Passengers holding Victoria passage warrants will be forwarded to Melbourne by these vessels.

Ship.	For	Register.	Burthen.	To sail.
COMMODORE PERRY ..	Melbourne & Auckland	2016	6000	Aug. 20.
BLUE JACKET	Melbourne	1559	4750	Sept. 20.
LORD RAGLAN.....	Melbourne	1900	5500	Oct. 20.

The celebrated clipper, *Commodore Perry*, will be dispatched for Melbourne and Auckland, in New Zealand, as above. She is one of the fastest clippers afloat, and her accommodations for all classes of passengers are superb.
For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool; or to GRINDLAY and Co., 124, Bishopsgate-street, and 55, Parliament-street; or SEYMOUR, PEACOCK, and Co., 116, Fenchurch-street, London.
Willox's Australian and New Zealand hand-books sent for two stamps. 129

SARL AND SONS, 17 and 18, CORNHILL, respectfully SOLICIT a VISIT to their magnificent ESTABLISHMENT. The ground floor is more particularly devoted to the display of FINE GOLD JEWELLERY, GOLD and SILVER WATCHES, and FINE GOLD CHAINS.
The SILVER PLATE DEPARTMENT is in the gallery of the building, and consists of every article requisite for the table and sideboard.
In the magnificent show-rooms is displayed a large and beautiful stock of ARGENTINE PLATE, the manufacture of which has stood the test of 20 years' experience.
SARL and SONS have also fitted up a separate show-room for the display of DRAWING and DINING ROOM CLOCKS of the most exquisite designs. Books containing drawings and prices may be had upon application.
SARL AND SONS, 17 and 18, CORNHILL, LONDON. 130

A BOON TO NERVOUS SUFFERERS.

TWENTY THOUSAND COPIES OF A MEDICAL BOOK for gratuitous circulation. HENRY SMITH, Doctor of Medicine of the Royal University of Jena, &c., who has devoted 15 years to the study and Treatment of Nervous Debility, Loss of Memory, and Indigestion, will send free, for the benefit of Nervous Sufferers, a copy of the NEW MEDICAL GUIDE, containing his highly successful mode of treatment, with necessary instructions by which sufferers may obtain a cure. Post free on receipt of a stamped directed envelope, from the author's residence, 8, Burton-crescent, Tavistock-square, London, W.C. 131

DR. MARSTON'S LECTURES—FREE ISSUE.—The following Lectures are ISSUED GRATUITOUSLY by the Professors of the ROYAL INSTITUTE OF ANATOMY AND SCIENCE, 369, OXFORD STREET, LONDON, firstly as a mark of sincere esteem to their distinguished colleague, Dr. MARSTON, M.R.C.S., L.S.A., and secondly from a conscientious belief that the lectures will do a vast amount of good, by enlightening the public upon subjects of the highest importance to their moral welfare and physical health, ignorance of which has to the present day been a most fruitful cause of human suffering and misery.
No. I.—NERVOUS DEBILITY (the result of youthful error), loss of memory, shortness of breath, dimness of sight, exhaustion, and general Incapacity. Addressed especially to young men.
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These lectures contain Dr. Marston's experience during 25 years of successful practice, and point out to those who need it simple yet effectual means of complete restoration to vigorous health.—*Medical Journal.*
State the number of the lecture required, and enclose two stamps to prepay postage; or the whole four may be had, neatly bound, 164 pages octavo, post free for six stamps.—Address, Treasurer, Royal Institute, 369, Oxford-street, London. 132

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
4000	Bedford United (copper), Tavistock†	2 6 8..	5 ..	4¼ 5 ..	12 7 0.. 0 3 6	—June, 1861
240	Boscean (tin), St. Just†	20 10 0..	50 ..	..	33 0 0.. 1 10 0	—May, 1861
200	Botallack (tin, copper), St. Just	91 5 0..	190 ..	..	443 5 0.. 2 10 0	—Feb. 1860
200	Brynford Hall (lead), Flintshire	12 10 0..	26 ..	..	14 0 0.. 2 10 0	—Oct. 1860
1000	Carn Brea (copper, tin), Illogan†	15 0 0..	70 .. 65 70	..	269 10 0.. 2 0 0	—Feb. 1861
2048	Carnyorth (tin), St. Just	3 10 0..	13½..	..	0 19 6.. 0 2 0	—Sept. 1860
200	Cefn Cwm Brwyno (lead), Cardiganshi.	33 0 0..	33 ..	..	9 0 0.. 4 0 0	—April, 1861
50000	Connorres (copper, sulphur) [L. £1].	1 0 0..	33s. .. 33s. 34s.	..	0 0 9.. 0 0 9	—July, 1860
2450	Cook's Kitchen (copper), Illogan	17 0 9..	29 .. 27 28	..	0 8 0.. 0 8 0	—May, 1861
12000	Copper Miners of England	25 0 0..	25 ..	..	7½ per cent.	— Half-yrly.
350000	Ditto ditto (stock)	100 0 0..	24 ..	..	1 per cent.	— Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0..	26 ..	..	5 8 0.. 0 5 0	—May, 1861
867	Cwm Erfin (lead) Cardiganshire	7 10 0..	16½..	..	5 8 0.. 1 0 0	—June, 1861
128	Cwmystwith (lead), Cardiganshire*	60 0 0..	240 ..	..	227 10 0.. 5 0 0	—May, 1861
280	Derwent Mines (sil.-lead), Durham	300 0 0..	380 ..	..	142 0 0.. 5 0 0	—June, 1861
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0..	355 ..	..	760 0 0.. 7 0 0	—July, 1861
358	Dolcoath (copper, tin), Camborne*	128 17 6..	510 ..	..	626 10 0.. 8 0 0	—June, 1861
512	East Basset (cop.), Redruth [S.E.]*	29 10 0..	86 .. 85 87½	..	82 0 0.. 5 0 0	—May, 1861
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6..	24½.. 24 24½	..	0 17 6.. 0 10 0	—July, 1861
300	East Darren (lead), Cardiganshire*	32 0 0..	67 ..	..	75 10 0.. 1 0 0	—April, 1859
2048	East Wheal Lovell (tin), Wendron	2 10 0..	— ..	..	0 5 0.. 0 0 0	—July, 1859
1400	Eyam Mining Co. (lead), Derbyshire	5 0 0..	— ..	..	20 3 4.. 0 10 0	—May, 1861
4940	Fowey Consols (copper), Tywardreath	4 0 0..	5 ..	..	41 9 5.. 0 2 6	—June, 1860
2560	Foxdale, Isle of Man, Limited (lead)†	25 0 0..	35 ..	..	61 8 3.. 1 0 0	—Dec. 1860
5000	Frank Mills (lead), Devon	3 18 6..	4¼..	..	0 11 0.. 0 3 0	—July, 1861
6000	Great South Tolgus [S.E.], Redruth*	0 14 6..	2⅞.. 2⅞ 3⅛	..	7 13 6.. 0 5 0	—Feb. 1861
1798	Great Wheal Fortune, Breage	18 6 0..	12 .. 10 11	..	1 0 0.. 0 10 0	—July, 1861
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0..	6 ..	..	0 5 0.. 0 5 0	—Mar. 1861
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0..	40 .. 35 37	..	14 10 0.. 2 0 0	—June, 1861
1000	Hibernian Mine Company	92 6 2..	— ..	..	6 15 0.. 0 15 0	—Feb. 1861
160	Levant (copper, tin), St. Just	2 10 0..	95 ..	..	1091 0 0.. 5 0 0	—May, 1860
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0..	125 ..	..	373 10 0.. 3 0 0	—June, 1861
9000	Marke Valley (copper), Caradon	4 10 6..	9⅜.. 8¾ 8⅞	..	1 1 0.. 0 5 0	—July, 1861
5000	Mendip Hills (lead) [L.], Somerset	3 15 0..	1¾..	..	2 1 0.. 0 2 6	—May, 1860
1800	Minera Mining Co. [L.], (id.), Wrexham	25 0 0..	180 ..	..	71 0 9.. 4 5 0	—May, 1861
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0..	14⅝..14⅛ 14⅜	..	14 7 11. 0 7 0	—June, 1861
640	Mount Pleasant, Mold	4 0 0..	25 ..	..	12 15 7.. 1 0 0	—Mar. 1861
6000	New Birch Tor and Vitifer Consols	1 6 6..	2 .. 1¾ 2	..	0 2 6.. 0 2 6	—May, 1861
1366	North Grambler, Redruth	2 7 6..	6¼.. 5½ 6¼	..	0 10 0.. 0 10 0	—Mar. 1861
6000	North Great Work, Breage	1 3 0..	4½..	..	0 2 0.. 0 2 0	—May, 1860
5000	Orsedd (lead), Flintshire	0 0 8..	1¼..	..	0 6 6.. 0 0 9	—Mar. 1861
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6..	9 .. 8¼ 9⅛	..	36 4 6.. 0 5 0	—July, 1861
200	Parys Mines (copper), Anglesey [L.]	50 0 0..	— ..	..	5 0 0.. 5 0 0	—Jan. 1860
200	Phœnix (copper, tin), Linkinghorne	100 0 0..	435 ..	..	449 10 0..55 0 0	—May, 1861
1772	Polberro (tin), St. Agnes	— ..	5 ..	..	6 9 6.. 0 15 0	—April, 1861
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7..	33 .. 34 36	..	59 15 0.. 1 0 0	—May, 1861
16	Rhosesmor	50 0 0..	— ..	..	1250 0 0..100 0 0	—
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0..	305 .. 300 305	..	346 0 0.. 5 0 0	—May, 1861
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0..	40 ..	..	103 10 0.. 1 0 0	—June, 1861
496	South Wheal Frances, Illogan* [S.E.]	18 18 9..	120 .. 115 120	..	355 5 0.. 1 0 0	—July, 1861
280	Spearne Moor (tin, copper), St. Just	31 17 9..	45 ..	..	9 15 0.. 1 0 0	—June, 1861
940	St. Ives Consols (tin), St. Ives†	8 0 0..	30 ..	..	484 0 0.. 0 15 0	—May, 1861
9600	Tamar Con. (sil.-ld.), Beeralston [S.E.]	4 10 0..	13¾..	..	5 6 0.. 0 2 6	—Jan. 1861
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0..	5⅜.. 5⅛ 5⅜	..	10 8 6.. 0 5 0	—Feb. 1861
6000	Tolvadden (copper), Marazion	— ..	2¼..	..	0 13 6.. 0 3 0	—Mar. 1860
4572	Trelyon Consols (tin), St. Ives	11 10 0..	12½..	..	7 0 0.. 0 10 0	—Sept. 1860
200	Trumpet Consols (tin), near Helston	57 10 0..	100 ..	..	52 0 0.. 2 0 0	—May, 1861
1024	Wendron Consols (tin), Wendron	11 13 10..	16 ..	..	8 15 0.. 1 0 0	—Jan. 1861
6000	West Basset (copper), Illogan [S.E.]	1 10 0..	19¼.. 17 18	..	21 15 0.. 0 5 0	—July, 1861
60	West Burton Gill (lead), Yorkshire	50 0 0..	— ..	..	14 10 0.. 3 0 0	—June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0..	47 .. 42 44	..	96 11 3.. 2 0 0	—May, 1861
256	West Damsel (copper), Gwennap	37 0 0..	55 ..	..	45 0 0.. 1 0 0	—May, 1860
6400	West Fowey Consols (tin and copper)	7 10 0..	5 ..	..	0 14 0.. 0 2 0	—May, 1861
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0..	305 .. 300 310	..	308 0 0..10 0 0	—June, 1861
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6..	92 ..	..	570 10 0.. 2 0 0	—June, 1861
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0..	105 .. 95 105	..	929 0 0.. 2 0 0	—May, 1861
500	Wheal Clifford (cop.), Gwennap [S.E.]	— ..	170 .. 150 160	..	89 10 0.. 5 0 0	—April, 1861
2000	Wheal Falmouth and Sperries	2 5 0..	8 ..	..	0 10 0.. 0 10 0	—Feb. 1861
128	Wheal Friendship (copper), Devon	50 0 0..	90 ..	..	2400 10 0.. 5 0 0	—Feb. 1861
512	Wheal Jane (silver-lead), Kea	3 10 0..	18 ..	..	10 10 0.. 1 0 0	—Feb. 1860
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	1 7 2..	11 ..	..	8 0 0.. 0 10 0	—Sept. 1860
4800	Wheal Ludcott (lead), St. Ive	2 10 8..	2¾.. 2⅝ 2¾	..	1 8 0.. 0 4 0	—July, 1861
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6..	45 ..	..	68 0 0.. 1 10 0	—May, 1861
100	Wheal Mary (tin), Lelant	36 2 6..	440 ..	..	280 5 0.. 7 0 0	—June, 1860
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]†	8 0 0..	10 .. 9 10	..	53 17 6.. 0 10 0	—June, 1861
80	Wheal Owles, St. Just, Cornwall	70 0 0..	300 ..	..	275 13 0.. 5 0 0	—May, 1861
5000	Wicklow (copper) [L.], Wicklow	5 0 0..	58 ..	..	41 17 6.. 2 12 6	—Mar. 1861

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

700	Aberdovey (silver-lead), Merioneth	1 10 0..	30 ..	..	0 10 9.. 0 10 0	—Mar. 1859
5120	Alfred Consols (cop.), Phillack [S.E.]	2 17 1..	1⅝.. 1¼ 1¾	..	20 3 0.. 0 2 6	—April, 1859
1624	Balleswidden (tin), St. Just	11 5 0..	12 ..	..	12 5 0.. 0 5 0	—Jan. 1854
1200	Brightside & Froggatt Grove, Derbysh.	3 0 0..	3½..	..	3 0 0.. 3 0 0	—April, 1856
2500	Central Minera (lead) [L. £5]	0 15 0..	5½..	..	0 4 0.. 0 4 0	—Sept. 1859
6000	Charlotte United, Perranuthnoe	2 3 2..	⅞.. ¾ ⅞	..	0 13 0.. 0 1 6	—Sept. 1859
2000	Collacombe (copper), Lamerton	5 5 0..	12 ..	..	3 5 0.. 0 8 0	—Dec. 1857
256	Condurrow (cop., tin), Camborne	20 0 0..	47½.. 40 45	..	85 0 0.. 2 0 0	—June, 1857
256	Copper Hill (copper) Redruth	48 0 0..	100 ..	..	2 10 0.. 2 10 0	—Sept. 1859
4076	Devon and Cornwall (copper)	4 16 8..	6 ..	..	0 10 0.. 0 2 6	—Feb. 1859
672	Ding Dong (tin), Gulval	39 2 6..	22½.. 17 19	..	16 7 6.. 1 10 0	—Mar. 1857
12800	Drake Walls (tin, copper), Calstock	2 1 0..	17s. .. ¾ ⅞	..	0 13 6.. 0 2 0	—Sept. 1857
2048	East Falmouth (sil.-id.), Kenwyn, Kea	2 15 0..	⅛..	..	0 7 6.. 0 2 6	—Jan. 1858
128	East Pool (tin, copper), Pool, Illogan	24 5 0..	400 ..	..	305 0 0.. 2 10 0	—Aug. 1858
6000	General Mining Co. for Irel. (cop., id.)	4 0 0..	5 ..	..	1 0 8.. 0 3 3	—June, 1853
486	Grambler and St. Aubyn (cop.) [S.E.]	47 10 0..	11 ..	..	23 0 0.. 1 0 0	—July, 1860
119	Great Work (tin), Germoe	100 0 0..	110 ..	..	221 10 0.. 7 10 0	—Feb. 1857
200	Herward United (lead), Flintshire	40 0 0..	10 ..	..	3 0 0.. 1 10 0	—July, 1860
6000	Hingston Down Con. (cop.), Cals. [S.E.]	4 16 6..	2 ..	..	2 16 0.. 0 2 6	—Nov. 1856
5000	Kelly Bray (lead, copper), Callington	4 3 6..	1⅞..	..	0 6 0.. 0 2 0	—Feb. 1860
20	Laxey Mining Company, Isle of Man	100 0 0..1200	..	..	1420 0 0..50 0 0	—June, 1857
470	Newtownards Mining Co., Co. Down	50 0 0..	35 ..	..	56 0 0.. 1 0 0	—Sept. 1858
5000	North Dolcoath (copper), Camborne	2 2 6..	⅛..	..	0 5 9.. 0 2 6	—June, 1859
700	North Roskear (copper), Camborne	16 0 0..	21 ..	..	157 0 0.. 4 0 0	—Sept. 1853
1024	Rosewarne and Herland United	11 8 10..	⅜..	..	2 10 0.. 0 10 0	—Oct. 1859
512	Rosewarne United (cop., tin), Gwinear	18 6 4..	24 .. 22 24	..	33 10 0.. 1 0 0	—Sept. 1860
12000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 16 0..	14s. .. 12s. 14s.	..	0 10 0.. 0 2 6	—July, 1857
128	South Crinnis (copper), St. Austell	19 0 0..	285 ..	..	60 0 0..20 0 0	—June, 1855
20000	St. Day United (tin and cop.), Redruth	2 5 0..	¾..	..	0 3 6.. 0 1 0	—Feb. 1858
400	United Mines (copper), Gwennap	55 0 0..	32½..	..	80 5 0.. 2 10 0	—April, 1860
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 13 6..	6s. ..	..	0 5 9.. 0 1 0	—July, 1858
1024	West Providence (tin), St. Erth	15 15 0..	33¼..	..	33 1 9.. 0 10 0	—April, 1857
240	Wheal Bal (tin), St. Just	15 0 0..	16 ..	..	4 0 0.. 1 0 0	—Feb. 1859
4096	Wheal Edward (cop.), Calstock [S.E.]	7 7 6..	2⅛.. 2⅛	..	0 5 0.. 0 5 0	—Mar. 1858
1024	Wheal Grylls (tin), Perranuthnoe	1 4 0..	4 ..	..	1 12 0.. 0 7 6	—Nov. 1859
5000	Wheal Kitty (tin), St. Agnes	4 12 6..	1 ..	..	0 18 6.. 0 2 0	—July, 1860
345	Wheal Lovel (tin), Wendron	33 0 0..	7 ..	..	31 0 0.. 1 0 0	—Sept. 1856
1024	Wheal Margery (tin, copper)	15 13 0..	4½..	..	0 10 0.. 0 10 0	—May, 1860
396	Wheal Seton (tin, copper), Camborne	58 10 0..	65 .. 60 65	..	131 15 0.. 1 10 0	—Dec. 1859
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0..	14½..13½ 14½	..	43 15 0.. 1 0 0	—Oct. 1860
1022	Wheal Tremayne (tin, cop.), Gwinear	12 12 6..	5 ..	..	10 2 6.. 0 7 6	—Jan. 1854
4096	Wheal Wrey Consols (lead), St. Ive	3 2 0..	¾..	..	2 12 6.. 0 2 6	—Dec. 1857

FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0..	132 ..	..	265 0 0.. 5 0 0	—June, 1861
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0..	38 ..34½ 35½	..	96 12 0.. 2 0 0	—Jan. 1861
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0..	8 ..	..	6 8 0.. 0 5 0	—Jan. 1861
18000	East Indian Coal, Calcutta [L.]	10 0 0..	10 ..	..	7½ per cent.	— Yearly.
70000	English and Australian [S.E.]	5 0 0..	3½..	..	1 2 6.. 0 5 0	—Feb. 1861
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0..	24 ..	..	18 5 0.. 1 0 0	—June, 1861
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0..	2¼.. 2 2¼	..	0 8 0.. 0 2 0	—June, 1861
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0..	8 .. 7 8 x d	..	8 6 2.. 0 3 4	—July, 1861
10000	Lusitanian (of Portugal) [S.E.]	2 0 0..	2 ..	..	0 17 3.. 0 2 6	—Aug. 1860
103815	Mariquita and New Granada [S.E.]	1 0 0..	½..	..	0 9 6.. 0 1 6	—July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0..	21s. .. 1	..	0 3 0.. 0 1 0	—Jan. 1860
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0..	33½.. 33 34	..	43 5 0.. 2 10 0	—June, 1861
20000	West Canada Mining Company [L.]	1 0 0..	1¼..	..	0 2 0.. 0 2 0	—June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0..	3 ..	..	4 5 0.. 0 15 0	—Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 5 0..	3½..	..	15 per cent.	—May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0..	4 ..	..	1 0 0.. 1 0 0	—June, 1855
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0..	5¼.. 4⅝ 4¾	..	1 16 6.. 0 4 0	—Feb. 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6..	1 ..		—Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6..	1⅜ ..		—Dec. 1860
6000	Central American (silver) [L.]	5 0 0..	8½ ..		—Feb. 1859
17000	Central Italian (copper) [7000 £2 paid]	0 6 0..	— ..		—Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 17 6..	⅜ ..		—Jan. 1861
10000	Copiapo Smelting [L.], Chili	10 0 0..	8½ ..		—Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0..	1 ..		—Fully paid.
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 0 0..	¾ ..		—April, 1861
30000	Ellerslie and Bardowie, Jamaica	0 18 0..	1⅛ ..		—July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0..	— ..		—Fully paid.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0..	2½ .. 2 2½		—Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 0 0..	1⅝ ..1¼ 1⅝		—Fully paid.
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0..	— ..		—Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0..	⅜ ..		—June, 1860
30000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 10 0..	½ ..		—May, 1861
60000	New Granada (gold), South America [S.E.]	1 0 0..	⅛ ..		—Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0..	1 ..		—Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 12 6..	⅜ ..		—June, 1860
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 10 0..	1½ ..		—April, 1861
80000	Scottish Australian Mining Company [L. £1]	0 10 0..	⅛ ..		—Nov. 1858
15000	South Europe Mining Company, Spain [L. £5]	3 0 0..	— ..		—May, 1860
50000	St. John's United (copper, lead), Newfoundland [L. £1]	0 10 0..	⅛ ..		—Mar. 1860
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 5s. pd., 25,000 £1 pd.]	— ..	— ..		—
1000	Western Africa Malachite (copper) [L.]	110 0 0..	— ..		—Oct. 1859
12000	Wheal Ellen, South Australia [L. £5]	2 10 0..	2¾ ..		—Nov. 1860
35425	Wheal Jamaica (copper)	1 0 0..	18s. ..		—Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0..	⅝ .. ⅝ ¾		—Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4825	Abbey Consols (ld.) Cardigan.	2 7 0..	1 ..		—Nov. 1860
1000	Allt-y-Crib (lead) [L. £5]	2 8 6..	2 ..		—June, 1861
4000	Allt-y-Maen (lead) [L. £1]	0 5 0..	12s. ..		—July, 1859
10000	Angarrack (copper), Phillack	1 1 6..	1⅛..		—June, 1859
1000	Ashburton United (cop., tin)	11 10 0..	14¾..		—Mar. 1860
10000	Bampfylde (copper), Devon	0 15 0..	4 ..		—Aug. 1860
4000	Bedford Consols (copper)	1 19 6..	¼.. 4s. 6s.		—July, 1861
2000	Berehaven (copper), Ireland	1 0 0..	1⅛..		..
7500	Bickleigh Vale Phœnix [L.]	2 0 0..	2¾..		—Fully paid.
200	Billins (lead) [L. £30]	20 0 0..	20 .. 15 20		—Feb. 1861
10000	Borlase Con. (tin), St. Just [L.]	1 0 0..	1⅛..		—Fully paid.
1248	Boscaswell (tin), Penzance	6 5 0..	8 ..		—Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	6 15 0..	4 ..		—Sept. 1860
160	Bosorne & Bollowall, St. Just	6 5 0..	10 ..		—Dec. 1860
123	Bosweddan and Wheal Castle	32 0 0..	— ..		—Nov. 1858
5000	Bosworthan (tin), Sancreed	1 0 0..	1⅛..		—June, 1860
5000	Bottle Hill (tin), Plympton	1 0 0..	1 ..		..
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 0 0..	22s. ..		—Jan. 1861
5000	Bronfloyd (ld.), Cardigan. [L.]	2 0 0..	4 ..		—June, 1861
4000	Brookwood	1 5 0..	3½..		—Mar. 1861
1200	Brynfelin [L.] [600 £1, 600 £5 pd.]	— ..	— ..		—April, 1861
500	Bryn Gwiog (lead), Flint	4 0 0..	33 .. 26 28		—Oct. 1859
2000	Bryntail, Llanidloes, Montgo.	5 2 0..	4 ..		—Mar. 1861
5850	Budnick Consols (tin), Perran	1 2 0..	1 .. ⅜ ⅜		—June, 1861
6380	Buller and Basset Unit. (cop.)	3 5 0..	1½..		—June, 1861
2448	Bwich (sil.-ld), Cardiganshire	4 9 0..	2¾..		—Nov. 1860
4096	Calstock Consols (copper)	5 10 0..	9s. .. 8s. 10s.		—Dec. 1860
915	Calvadnack, Wendron	18 5 0..	6¼.. 7 7¼		—Mar. 1861
1000	Camborne Consols (copper)	16 10 0..	8 .. 7 8		—June, 1861
4600	Camborne Vean & Wh. Francis	7 12 4..	1¼.. 1¾ 2		—July, 1861
914	Caradon Cons. (cop.), St. Cleer	21 12 0..	8½.. 8½		—June, 1861
1000	Cardigan Consols [L. £10]	7 0 0..	9 ..		—Mar. 1861
916	Cargoll (silver-lead), Newlyn	15 5 7..	15 .. 12 14		—Sept. 1860
6000	Carn Camborne	0 7 0..	1⅜.. 1⅛ 1¼		—May, 1861
4370	Carnewas (ld., cop.), Mawgan	1 3 0..	⅝..		—June, 1861
3000	Carn Vivian (tin, cop., lead)	1 19 6..	2⅛..		—April, 1861
7000	Carrack Dews	2 16 0..	1 ..		—April, 1861
1056	Carvannall (cop.), Gwennap	21 11 7..	3 ..		—Dec. 1860
10000	Carway and Duffryn [L.]	5 0 0..	5 ..		—Fully paid.
20000	Carysfort (cop., id.) [L. £2½]	0 10 0..8s. 6d..			—Mar. 1859
25000	Casara (lead), Carma. [L. £1]	0 8 0.. 12s. ..			—Dec. 1860
10000	Castleward, Ireland [L. £1]	0 10 0..15s6d..			..
2500	Cefn Cilcen (lead), Flintshire	1 5 0..	1 ..		—Sept. 1860
2000	Clara (silver-lead) [L. £4]	3 17 6..	2¼..		—Oct. 1860
984	Clijah & Wentworth (tin, cp.)	27 0 6..	1⅝..1¼ 1¾		—Jan. 1861
6000	Clinton and Edgecombe United	1 0 0..	1⅛..		—Oct. 1860
3135	Coed Mawr Pool (lead) [L.]	4 7 0..	4 ..		—June, 1861
2560	Colomendy (lead), near Mold	1 0 0..	21s. ..		—No call.
5000	Cornubia (tin), Roche	0 15 0..	1 ..		—April, 1861
10000	Craigton (id.) [L. £1], Kirkcud.	0 10 0..	¾..		—June, 1859
906	Crane (copper), Camborne	8 0 0..	8½.. 8		—July, 1861
3000	Craven Moor (id.), Yorkshire	0 10 0..	4s. .. 3s. 4s.		—No call.
12000	Crelake (cop.), Tavistock	— ..	3 ..		—No call.
8000	Crookhaven (cop.) [L. £2½]	0 17 0..	9s. ..		—Mar. 1861
2000	Crowlwm (lead), Llanidloes	1 10 0..	⅞.. ⅝ ⅞		—No call.
6000	Crowndale (cop.), Tavistock	0 11 0..	3 ..		—Nov. 1858
6000	Cuddra (cop., tin), St. Austell	1 16 0..	2¼..		—May, 1861
4000	Cumberland Black-Lead [L.]	5 0 0..	6¼..		—Fully paid.
7000	Cwm Afon (cp.), Festl. [L. £1]	0 19 0..	— ..		—Dec. 1860
21000	Dale, North Staffordshire [L.]	1 0 0..	1 .. ½ ¾		—Fully paid.
4817	Devon and Courtenay (cop.)..	1 9 0..	11s. ..		—Mar. 1861
5000	Devon Great Wheal Ellen	2 0 0..	— ..		—Mar. 1861
12000	Dev. New Copper Co. [L. £2]	— ..	2 ..		..
12000	Devon Union (copper) [L. £1]	0 12 6..	¾..		—May, 1861
4566	Devon Wheal Buller (copper)	3 9 0..	¾..		—May, 1861
1000	Durlo (tin), Lelant	6 12 0..	7½..		—Mar. 1861
2000	Dolcoath United [L. £5]	1 0 0..	2¾..		—June, 1860
5000	Dulta (tin), St. Stephen's [L. £1]	0 12 6..	⅜ ..		—July, 1861
3000	Dyfngwm (lead), Wales	12 6 6..	9½..		—Sept. 1858
244	Eaglebrook (lead.), Cardigan	75 10 0..	14 ..		—June, 1861
4096	East Alfred Consols (copper)	3 12 3..	1¾.. 1⅛ 1¾		—May, 1861
6000	E. Bertha Con. (cop.), Tavist.	0 17 0..	1½..		—July, 1861
6000	East Budnick and Mount	0 10 0..	9s. ..		—Jan. 1861
6000	East Carn Brea (cop.) Redruth	3 5 0..	7¾.. 7¾ 8		—June, 1861
6400	East Crinnis and South Par.	2 7 6..	2 ..		—May, 1861
4000	East Devon Gt. Consols (cop.)	0 11 6..	2½.. 2 2¼		—June, 1861
4000	East Fowey (cop.) [L. 50s.]	1 5 0..	1½..		—June, 1861
6000	E. Grenville (cop.), Camborne	0 16 6..	42s. ..42s. 44s.		—July, 1861
4000	E. Gunnis Lake & S. Bedf. (cp.)	5 9 6..	¾..		—Mar. 1861
12000	East Mona (cop., &c.) [L. £1]	0 5 0..	— ..		—May, 1861
8000	East Polberro, St. Agnes	0 5 0..	⅛..		—May, 1861
4096	E. Providence (tin), Uny Lel.	2 3 5..	1⅜..1⅛ 1¼		—June, 1861
6000	E. Releath (tin, cop.), Wendron	0 1 0..	1 ..		—Aug. 1860
5000	E. Rosewarne (cp., tin), Gwin.	2 10 0..	1¼..		—May, 1860
1122	East Seton, Camborne	0 2 0..	— ..		—May, 1861
256	East Tolgus (copper), Redruth	60 0 0..	52 ..		—June, 1861
1000	E. Trefusis (cop.), Gwennap	7 8 10..	3½.. 3 3½		—June, 1861
1024	E. Treskerby (cop.), Redruth	3 10 0..	2 ..		—July, 1861
1190	E. Wheal Agar (cop.), St. Cleer	8 2 0..	2 ..		—Jan